**The Japs Never Knew I Was There**

**…and Other Stories**

**By John Iredell Hall**

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**Foreword**

For those of you who never met John I, consider yourself cheated. At the risk of lapsing into the kind of mawkishness he targeted with such consummate enthusiasm, few of his ilk pass our way--more the pity--but viewed on balance, thank God.

This book presents essays written primarily for presentation to the Palaver (a.k.a. Claptrap) Club, a group of "intelligent laymen" he managed to delight and out-fox for enough years to make its members wary of future associations. Not only were his presentations topical and interesting, but they provide a peculiarly accurate insight into the man himself (or have I got it backwards?).

I hope you will consider this the basis for a more complete work containing input from such family and friends willing to lend their good names and reputations to the project. As my contribution to a fair beginning, what you see here is from original (and damn-near illegible worksheets) committed to posterity via the magnetic medium so it is available for update, improvement, reproduction, and the delight of all.

As you read these essays, bear in mind the time frames in which they were conceived. Some, such as Genetics, and Nuclear Atom will be superseded in the light of more recent research; others such as Women and Government in Medicine will be dated by events. Most will show their age by reference to contemporary matters of currency or fashion--even John I's beautiful turn of phrase may seem quaint to some and more's the pity for that--but there is something timeless and incisive in them all, and that's as good a monument to his genius as any.

Enjoy.

**Recollections**

Many of us remember his early morning audiences in the dressing room of the Operating Room where he usually spent an hour preparing for his day. John I. never really forgave Dave Rozier for naming his bird dog John I. Hall. Dave said he felt he had to do this because it took the dog an hour to attend to his bodily duties before he would start hunting in the morning.

At the end of an exhausting day, sitting at the nurses' desk in utter dejection he told Waddell Barnes: Anyone who practices medicine is at the mercy of any S.O.B. who has five dollars."

After a long discussion with Shannon Mays, a psychiatrist friend, John I. concluded: I have finally decided what my trouble is. I want to return to the womb but I have claustrophobia."

In a moment of total exasperation when his orders on a patient had gone haywire, John I. said: The Macon Hospital is the only place in the world you could turn loose a herd of 50 wild elephants and a half hour later, no one would have seen or heard of them. They just came on duty."

One day he came to the hospital having just received a citation for a traffic violation and he commented: There are lots of kinds of S.O.B.s, including the gilt edged with tassels, but only a few who have a badge to prove it."

Some years ago John I. broke his leg. When asked what happened, he said: "I fell on the floor like an old fool.”

He was in the hospital for some time. During this time the hospital administrator had publicized that enemas would be charged for at the rate of one dollar each. He left a note along with twenty-five cents and said: "I did not have an enema but I did pass gas."

He commented about a patient who had gone to a number of doctors for a variety of complaints: "If Jesus laid a hand on her she would be disappointed to have nothing to bitch about."

Some years ago, before the days of the Coronary Unit, he was discussing the complexity of the equipment that he needed for orthopedic work. He referred to Tom Ross, a cardiologist friend: "All he has to take with him is a stethoscope and a roll of death certificates."

And again regarding the aggravation of the patient who would not or could not give a history of his illness, a colleague said, "It's like practicing veterinary medicine." John I.'s comment was: "No, the vet can shoot them."

He was recently asked about bone glue which is being developed for many orthopedic procedures and about the likelihood of its being used in intervertebral spaces to avoid the many disc operations that are now being done. John I. said: "That is a real challenge. I used to love challenges but now you can take them all and stick them up your ass."

John I. had his own philosophy about enjoying the good things of life: "Anything worth doing is worth overdoing."

And expressed in another way: "I abhor moderation in any form."

On one occasion John I.'s wife, Jessie, had an interior decorator come to their rambling old home on High Street with an eye to remodeling. Kit Birdsey had great plans and after looking over the house was outlining them to John I. who commented to her: "Kit, you must understand that I intend to spend the rest of my life in genteel squalor."

John I. lived in Macon all of his life and loved Macon. He said of Macon: "Macon has more old ladies riding on the back seats of Cadillacs picking their noses than any other city."

On one occasion when he eased himself back into a reclining chair and tilted backwards, he commented: "Blood moved out of my legs that hasn't moved in 15 years."

When he was sitting in a restaurant next to a table of young sloppily dressed and bearded collegians, he commented: "I can't tell the difference between avant-garde and just plain nasty."

John I's latter years were spent in considerable distress. He had chronic lung disease which limited his breathing capacity but he never complained, except about getting up in the morning. About this he said: "I deserve a medal every time I get out of bed."

Exercise was a favorite topic. He claimed to get his exercise acting as pall bearer at his athletic friends' funerals.

When his son, Jay, was about age 12, John commented: "He moves just enough to keep from getting bed sores."

And on a night when Jay was chasing cats outside of his house who were "fighting", his wife suggested that this might be a good opportunity to talk with Jay about the facts of life. John I. said: "I thought of that but decided that the exercise would do him more good."

John I.'s excellent essay on aging is included in this document and he has profound insight into the subject. However, one day he said: "The greatest advantage of old age is emancipation from sex."

And at the birth of his last child, he said: "I'll never trust old age again."

One of John I.'s essays was a profound discussion of suicide. When he heard of a friend's suicide, he said: "But for the grace of God, it could have been me."

A most memorable occasion was a dinner given by his fellow orthopedists on the occasion of his retirement from active practice. The room was filled with family, friends, and all of his orthopedic peers. Of the latter he said: "There is not a lemon in the crowd."

After many glowing accounts of John I.'s expertise, character and experiences, he was asked to talk. He began with: "It's good to see that I will have plenty of pall bearers."

**Government in Medicine**

I have tried to reach a decision in the matter of government in medicine that is based on arguments and opinions of such people as are presumably experts on the subject. The conclusion to which I have come is that such arguments and opinions on both sides are so biased as to be completely worthless. I have never had any faith in the mouthings of political ranters, so have had none to lose, but I have been more and more disillusioned about the validity of the arguments most frequently heard on the medical side.

Let it be known that there is no doubt in my mind that medicine as the New Frontier policy would have it practiced would eventuate into something closely akin to frontier medicine but without the element of necessity making it excusable.

The expressed idea of the bright breast-beaters and do-gooders that all hardships and all inequities and all defeats in any system can be legislated away seems to me to spring from a kind of messianic complex which afflicts politicians. This feeling may be genuine which is rare, or cynical, with an eye toward the next election which seems to be more common. Sometimes as in the case of Roosevelt II, it is the desire to go down in history as the great one.

The reasons for being opposed to the socialization of medicine which appeal to me are those which would probably have no weight at all in a public debate except with practitioners of medicine. These reasons are never used because they are based on the unpalatable fact that given the opportunity, and especially if that opportunity has public sanction, the average human being will show no mercy in exploiting it to his own benefit or at least what he imagines this to be.

Those who favor such legislation have at their backs the argument of perfection, namely that since great numbers of citizens of the United States are without medical services or must do with grossly inadequate services and since no effort is made by the medical profession to correct this inhuman situation, the government is bound to step in and right it. The spokesmen for organized medicine deny that this is the case at all and cite the quite probable fact that the best medicine in the world is practiced in the United States and somewhat less probably that it is adequately distributed.

They are both wrong to an extent but they are either ignorant of the facts or ignore them. How wrong the opposite side may be depends on your definition of adequate. The facilities for handling service or charity cases, both as to personnel and equipment, including waiting, treatment, and hospital rooms, leave something to be desired. Certainly the dispensing of charity is a rather cold proposition at best and few would choose it. This, however, has nothing to do with the adequacy of the care. Inadequacy of facilities certainly reflects itself in inadequate medical care if these inadequacies are gross. That this exists in some ways and at some times even in a city the size of Macon cannot be denied. By and large, the attendance at outpatient clinics and on in-patients at the Macon Hospital by practicing physicians is good but not all do their share. This, however, represents only a small part of the inadequacy. The chief defect is that in certain categories, there are not enough physicians. This is far more important, however, in other places than in Macon.

Equipment, laboratory facilities, and so forth are used without discrimination for pay and service cases at the Macon Hospital but such refinements as air conditioning, more attractive rooms, and so forth are largely saved for the pay cases. I may say here, however, that the white service floor at the Macon Hospital is in my opinion a disgrace. There is a plan afoot now to abate it but it remains to be seen how much and how soon.

That dignity is often affronted in such surroundings is true. It is also true that the best medicine cannot be practiced here and at times it is barely adequate. There are many reasons for this but most important are crowding, noise, and lack of help.

The situation is not quite so good as certain ones would have you believe but it is a far cry from the condition that politicians loudly deplore.

The medical profession has been accused of a callousness to suffering that would do credit to Genghis Khan. This has the effect of seriously impairing the status of the profession much beyond the point that may be just. A little impairment could be salubrious but I cannot abide the judges that have felt themselves qualified. This opinion on their part has been due not to any knowledge of callousness but to the fact that we have refused to accept slavery on their terms. This is a fine opportunity to declare that we must be disciplined and instructed in ethics so that Hippocrates might once again hold his head high and stop rotating in his tomb. These judges by implication are saviours sent from heaven to rescue the helpless from neglect and would no doubt feel it not unjust if a season was set aside in their honor in the manner of Christmas.

I admit in moderation to some of their accusations but the great majority of us need not pray more constantly or fervently for forgiveness than the Son of Man. It is though these people had suddenly discovered the clay feet that all human beings possess.

It is one aspect of these feet of clay that I wish to comment upon. I have mentioned above the unconquerable penchant of man to kill the golden goose. Nowhere is it better seen than from the physician's vantage point. Equal to this urge to do the goose in is the invariable tendency to blame one's predicament on somebody or something else and any price one has to pay is too high if indeed it is felt that one should actually pay anything either in goods or suffering or inconvenience. If a man is actually paying his own way and especially if he is not wealthy, he is able to keep his feet on the ground and resist these impulses. He behaves as a man because of pride which strengthens such maturity as he has. He is unable to find a father or mother image in the picture that he may fly to for comfort and he is unable to vent his wrath childishly, his pride prevents it. This is not the natural reaction, it is one imposed on him by his status as a man who takes care of himself. This gives him the strength not to cry out or retire to the womb and also the strength to get well.

Furnish a man or woman with the opportunity, it need be something amazingly small, to turn a deaf ear to the voice of pride or conscience; aid and abet this tendency in the least, and one has on one's hand either a carping, complaining, uncooperative, suspicious, paranoid lout or a mewling, puking infant.

The number of people in the world who are awaiting or actually seeking an opportunity to retire from the lists or work off their hostilities by having other people pay and pay or worry and worry is estimated by me as something over 80% of the whole. Sometimes when in a better frame of mind, I lower this estimate to 75%. Theoretically, of course, the figure is 100% but we may only realize this if the paternalism of the government is allowed full sway.

A combination of these two primal urges is usual but one or the other is ascendant depending on circumstances and personality. It is not necessary for me to go into the matter extensively as you are all familiar with the personality types and quite possibly familiar with the effect of certain circumstances.

The hostility engendered by automobile and compensable industrial accidents come first to mind. These comprise the great majority of problem cases. Of the two, automobile accidents produce the most difficult ones. Here there is an obvious culprit on whom to blame our troubles. He has assaulted us without cause and righteous indignation rises to prodigious heights and with far-reaching effects on both the psyche and soma. This is a perfectly logical reaction and in some degree uniformly follows these incidents. It seems to reach its highest development when one vehicle is stationary as in the common rear end collision. In these, the situation is compounded by the element of complete surprise.

The culprit in industrial accidents may not be clear to you but it is to the injured employee. Unconsciously he looks upon the company he works for as a heartless ogre which uses him and eventually throws him aside. In this he is encouraged by the unions whether or not he may be a member. Even when the accident occurs as the result of the most flagrant negligence on the part of the employee, the feeling is basically the same and has the same detrimental effect on his powers of recovery, both mental and physical.

I would say a word here about malingering. Cases of this are extremely rare. I doubt that I have seen a half dozen in nearly 32 years. It is usually impossible for the average human being to feign disability where there is none at all. Individuals who can do this are usually psychopathic personalities.

We are not discussing these here.

We have always had our ladies who have "never been strong" and our men who have been lost since casting off from their maternal apron strings. They have always been a great trial to their families but usually spouses have seemed to gain strength from this adversity and emerged as very mature and tolerant persons who are a cut or two above the common herd. They are generally highly respected by their acquaintances. They have accepted the responsibility for one reason or another and go on with it. I am sure you are all familiar with such cases.

If, on the other hand, they are offered a way to deny this responsibility which is acceptable to their conscience and to society, they will quite naturally seize upon it and straightway the poison of being imposed upon replaces the tonic of having a problem to be mastered. This is exactly the same process as occurs in the person who is the victim of illness or injury.

It seems to follow then that the opportunities for escape should be minimized not increased and that sanction for such escape withdrawn not furnished, whether this be intended or not. A government program of medical care would not furnish such opportunity unless it could be rigidly supervised against abuse and provision made for the punishment of abuse. This can never be except in a totalitarian state. Politicians would never relinquish their unwritten right to meddle and to abuse if such abuse would endear them to their constituents. In any controversy the doctor would be wrong because the great American public, if one believes campaign speeches, is always wise and right. There exists now a law which makes it a misdemeanor to accept or seek free care at the Macon Hospital if one is able to pay. Undoubtedly this has been violated many times but I do not know of a single instance in which it has been invoked.

It is unpleasant to know that a disgruntled patient or relative would have only to write to his State or Federal representative to have the hospital or doctor hauled on the carpet for an explanation regardless of how trivial or even frivolous the complaint. The loss of time, the inconvenience and the possible damage to reputations would, to say the least, be annoying. Even admitting that some such recourse for the patient is good and just, there is no way to screen the complaints and the ratio of the justified to the total would be very small indeed. Even if a local board were set up, there would be nothing to prevent going over its head.

The paperwork which would be involved in such a system is, I think, a matter which you can all visualize. It is quite tedious now and I am afraid that then it would actually encroach on time spent with patients or in study.

These doubts about the life of a doctor under such a system are not confined to him alone but also causes a prospective medical student to reexamine his ideas about a medical career. I believe many good men would change their plans and choose some other work. Already the long course of study, the long deferred entry into actual practice and the lower opinion of doctors which seems to prevail has caused the loss of superior students to other professions, chiefly engineering and the others which offer much quicker return on time and money spent. If in addition the candidate must look forward to a government regulated and supervised life of practice, he is even less apt to choose it. Doctors of course are no more deserving of freedom than anyone else but it is what we are all seeking. We may be pardoned if we do not choose to surrender what we have of it unless we can be shown good and sufficient reasons for doing so.

It may be said that no bill yet offered involves any such abject surrender of freedom but there is no doubt in my mind that this would come. Further legislation to remedy defects which are certain to appear would be inevitable and would result in further tightening of government control. There is certainly nothing in the philosophy of the present administration which offers any reason for believing otherwise.

It may be that this trend is the wave of the future. Certain it is that there are enough defects in the present system to warrant changes but whether it is necessary to throw out most of it in accomplishing these changes is very doubtful.

The indigent should be care for in a way that preserves self-respect and the average man protected against the expense of catastrophic illness if his income is such that he cannot afford this type of insurance. Suppose, however, that it is the breadwinner who gets sick or injured. Here the tragedy economically is the loss of income, not the medical expense. What provisions have the bleeding hearts in Washington made for this? This man can get treatment and good treatment whether his money gives out or not, but who feeds and clothes the family before they are completely destitute? Isn't this man expected to carry disability insurance if he properly fills his role as protector? I can see no wrong in the government subsidizing insurance premiums according to an individual lack of ability to pay and also to offer dispensation tax-wise to the others.

The Internal Revenue Service is also a built-in social service facility and I presume could screen the taxpayers for insurance purposes without having to add a great deal to personnel or equipment.

The decadence or rather stagnation which is generally recognized to have overtaken the non-specialist in England under the National Health Service is an inevitable accompaniment of any such plan. It is certainly present but no figures are available to show the individual loss of drive and initiative, the gradual slowing down of study, the paralysis that comes with the knowledge that there is no time for self-improvement. Therefore, such an argument cannot be documented with statistics and would carry no weight if one's opponent chose to challenge it. It is, however, true and is admitted by these general practitioners. It cannot be dismissed by saying that they are probably no good to begin with. The same thing would happen here. Overwork without the feeling of accomplishment, frustration without some hope of a better day will kill ambition in short order. Survival of the proper enthusiasm and dedication under such circumstances would require a degree of maturity approaching the divine.

All are in bondage to some extent, the physician perhaps more than most, but his bondage is self-imposed and in this he is more fortunate than most.

Unfortunately, the people like the idea of free medical care regardless of its quality. They can seldom judge quality and the question of compromising the progress of medicine seems not to have entered their heads.

English physicians have asked the question whether or not medicine there is simply going on momentum generated pre-National Health Insurance and is showing diminishing returns, in other words living on the principal. This, I think, goes to the heart of the greatest defect in this and any system that undermines the doctor's influence in his own profession.

**The Japs Never Knew I Was There**

I suppose most of us were at dinner on the day of Pearl Harbor or perhaps taking an after-dinner nap. If by any chance you missed the absolutely electrifying broadcast announcement, you have no way of knowing the effect it had on those who were listening in at the time. Hearing it second hand or from later broadcasts was moving enough but in no way could it compare to the adrenal squeezing effect of that first burst of words from an announcer completely shaken loose from his composure. It brought back quickly dissipated memories of Orson Welles' Martian Invasion broadcast.

It was not the coming of war that was such a shock. We had been moving toward it for a long time and were really expecting it though, I thought, and I suppose most of us did, that it would come from the Atlantic side. I suppose the mode of its coming had a great deal to do with it though Japan had done the same thing to Russia 35 years before, not with airplanes to be sure but with a devastating surprise attack on Russian sea power in the Pacific. One did not wish to dwell on the outcome of that war and what Japan had done to Russia's remaining warships during the hostilities.

Perhaps the jump from contemplation of it to actual war was a greater one than we suspected and with far more shock effect.

I also think that as a country we felt that it would be our decision to go to war or not and at our leisure. It had the effect of having a chair pulled out from under you. Those of you who have had the experience know the rudeness of the blow accompanying it.

Then there was the fact that two high officials of the Japanese Diplomatic Corps were in Washington for conversations presumably aimed at maintenance of peace. It was felt that any decent people would at least wait until these had shaken the dust before belting the host. It was said later that these two were as surprised as we were at the attack. It seems a little strange but could, I suppose, be true. Japan was run by the military and the Diplomatic Corps probably were poorly informed as to the details of procedure at least.

This little preamble is merely to make easier for me the following infliction on your patience.

For some time prior to this my friend, Goodrich Henry of Augusta, and I had laid plans to join up with the Navy together come hostilities. Our letters to each other must have crossed and it was not long before we both applied for a commission in the Medical Corps. It appeared that it would be necessary for him to go to Columbia, South Carolina for his examination, while I could simply slide down to the local post office and be checked by a friend of mine, Commander Johnson of the regular Navy.

Our plans to slap the Jap in unison were blighted by the honesty of the doctor at Columbia who turned Goodrich down because of poor vision. This same test I had passed under Commander Johnson with flying colors which was strange because compared to me Goodrich was a veritable eagle. It appeared that Commander Johnson with great admiration for my patriotism had let me read the fifty foot line at about ten feet. Also I had nailed his wife's hip for free a year before. Also I had walked into the examining room without bumping into the door. What better qualifications do you want in a fighting man?

I was a little surprised when my commission as Lieutenant Commander M.D., U.S.N.R. arrived accompanied by orders to report to Headquarters 6th Naval District, Charleston, South Carolina in ten days. This seemed a shockingly short period of time in which to settle my affairs and allow myself to get into a naval frame of mind. I was rather put out with the Navy and was seriously toying with the idea of forwarding my resignation when I was informed by Commander Johnson that these papers were not in effect until I had taken the oath and signed on.

I should have known this, I suppose, but I was not familiar with these goings-on and I suppose I just didn't think - a thing that was to occur many times during my long naval career.

Of course, this advice put the matter in an entirely different light. It occurred to me that I might even delay signing indefinitely and be a hero and stay out of gunshot range at the same time. I could show my orders and commission at any time to the doubters.

However, after about a month of arranging, I figured I couldn't, with honor, keep the Navy and the Japs waiting any longer. I hied myself down to the aforementioned local post office and stumbled through the necessary formalities. I remember the trapped feeling as I finished signing my name and wondering if a wild, free creature like myself would be at his best under discipline or, indeed, if he could survive. I'll answer that one now. I didn't.

On April 13, 1942 I reported to the 6th Naval District of Charleston and was assigned to the hospital at the Charleston Navy Yard. A strange situation obtained at this brand new (three days old) installation. The Chief of Orthopedics was a former OB-GYN from Atlanta, while an extremely capable orthopedist, also from Atlanta, had been railroaded down to the office of Officer Procurement to do short-arm inspection. Granted, he could probably do this as well as the OB-GYN man but it left a gaping hole in the hospital staff. We were well equipped with specialists in female disorders but orthopedists were at a premium, and it struck me as a little strange at the time. However, I soon reached the point where nothing surprised me. Indeed, such was my training in the Navy that to this day I surprise with great difficulty.

Housing was something of a problem in Charleston but after running back and forth and standing in line, I finally won a spot in a private home. It was in regard to the finding of a better bunk-house that I finally was made to know the almost superhuman talents of our Chief of Orthopedics. After batting about from house to house for several months, which the Chief was also having to do, it was getting pretty tiresome. I had about resigned myself to the situation but not he. It so happened that the government had at about this time finished a batch of shoe-box houses designed for the use of military families. No one else need apply. This did not daunt the chief. He was at the time separated from his wife, in fact if not legally, so he decided that there was nothing to do but procure one of these hovels by the simple process of showing his papers and taking it in the name of Lieutenant Commander and Mrs. Smith. It was but the work of a moment and shortly the house was occupied by Lieutenant Commander Smith with his helpmeet, Lieutenant Commander Hall. We were both, of course, in the shadow of Portsmouth Naval Prison but we lived happily there for some nine to ten months until I was called away for duty elsewhere.

This is but one incidence of the man's fathomless talent for genteel discovery. You all know the type. The scarcest items of food and drink were to be had in the greatest abundance by him. My mouth hung open so often in awe of his methods and results that my vocal cords bore a deep tan for months after I left Charleston. One day he found that a British ship in for repairs was carrying a huge supply of choice Argentine raw beef; more, in fact, than could be used by the ship's company. He immediately set about to get some. This was supposedly impossible because of the existence of laws strictly prohibiting the landing of South American beef. Hoof and mouth disease was the reason for the law. This had nothing to do with the edibility of, or contact with the meat by humans. Only cows and so forth need have fear. Soon our restaurant sized Frigidaire (also arranged by the Chief) contained a satisfactory quantity of the stuff.

When all others were forced to drink rum, the Chief had bourbon. He was the favorite of all. Captains invited him to dinner and the Admiral's barge was a familiar ground to him. As a matter of fact, he was so well liked by the various hospital skippers that came and went that they would not let him be transferred and when I returned for a short visit in June of 1946, he was still carrying on at the same old stand. So far as I know, he is the only officer in naval history who stayed so long at one place unless he were dead and buried. I know that he stayed there another year after my visit.

Enlisted men came to him with their problems which he solved with a wave of the hand. The fact that the advice given was usually, no doubt, as full of holes as Swiss cheese had no visible effect on the esteem in which he was held. I am also quite sure that had the St. Cecelia Society not appeared to him as being a rather stuffy group, he would have been a member in good standing long ere the war ended. Rather typical of him was the statement he once made to me that he was having a party at the officer's club for fifty or sixty of his most intimate friends.

He and the hospital psychiatrist once flew to Norfolk for a day but were socked in by a hurricane for three days. When they were finally decanted back into Charleston, the Chief had most of the poker money in Norfolk and the psychiatrist looked like he had seen a ghost. This state had been brought about partly by whiskey, partly by the hurricane but mostly by the Chief's tales of his war record to date, the enormity of which was too much for even his hardened psychiatric ears. I suspect his complete inability to fit the Chief into any known human category also contributed to his limp state.

About two weeks after I got to Charleston, having been indoctrinated, I had my first O.D. duty. This usually consisted in sitting until the fanny was numb, signing dozens of unread documents, receiving phone calls from personnel on leave regarding the sudden death of close relatives with requests for extension of leave (I may say that the mortality of such close relatives was enormous, making that at Iwo Jima or Chickamauga seem as nothing) and as the night wore on inspecting the boisterous drunks apprehended by the Shore Patrol and dragged in for expert opinion regarding their state of inebriety. This, my first duty, had to be different. A lady in the dependent's ward went into labor and as the head was presenting, I, as O.D., was informed that the lieutenant in charge of such matters could not be found and it was, therefore, my duty to attend to it. It had been exactly fourteen years since I had delivered a baby but I got by with it, being thankful that it was the head and not the rump which was presenting. Had it been the latter, I would really have been in a pickle.

Very shortly after this, it was either my next or the next but one duty, a call came to my desk that a German submarine had been sunk off the South Carolina coast and that the survivors were being brought to our hospital. Having wounded in the hospital would be quite a novelty for it was so early in the war that we had received none. I remember there were only four live ones that were brought into the hospital. There were some who were not hurt at all and were run through the yard dispensary and straight to the brig but I think these were very few. The sub had been sunk by a P.C. boat which had only one gun of any size and that was a three-incher. The sub was forced to surface by a depth charge and with any luck at all would have sunk the P.C. boat as the sub had a five inch deck gun. It was pure luck that the first shot from the P.C. hit this deck gun squarely.

We were introduced to German arrogance by a Chief Petty Officer named Heinrich Bohlmann who had to have his left arm amputated. He was insufferable but it was evident that the word had been passed from above to treat POWs kindly for you never saw such pampering in your life. The Red Cross outdid itself, stopping short only of putting fresh flowers in his room every day. It was certainly sickening and when one day he threw his plate at a steward because he was told he couldn't have a second helping of dessert, we were almost ready for open revolt. Germany was riding high at the time and so was Heinrich Bohlmann. He was finally taken away in the dead of night by a squad of Marines armed to the teeth. It was said by those present that he was more than a little shaken by this, apparently thinking it was a firing squad.

About this time the Navy Yard was receiving numerous warships and an occasional cargo ship which had come in for repairs mostly from torpedo damage. It was awesome to see a cargo ship in dry dock with a ragged hole some 20 feet across on one side and directly opposite a huge bulge with thousands of perforations where bits of metal had been blown completely through the ship. I saw only two or three of these as only a very few survived to get to port. The striking thing was that those I did see were hit dead center. It was said that during the early evening the subs would surface and wait for a ship to cross its sights silhouetted against the glow in the western sky and this way a miss was scarcely possible and hits were usually in the middle.

All coastal towers were dimmed out in an effort to shorten the glow time and limit it to the natural evening light. It was not to throw bombers off the track as some thought and many wrote indignant letters asking why the shades had to be pulled in their houses while the Cooper river bridge was lighted up like a Christmas tree.

This dim-out came near costing the life of a friend of mine who thoughtlessly went swimming at Sullivan's Island about 10 o'clock one night. There was no moon and no light from the beach houses and when he got tired and decided to come out, it suddenly struck him that he had no way of knowing which way to go. Chances are that if we had not heard him calling us, he would have drowned. We flashed a light several times and he finally made it.

Oil from sunken tankers came up on the beaches occasionally but not nearly so much of it as was seen in some other areas, or so I was told. I don't know whether it was because so few were sunk there or whether the currents carried it away. It didn't often interfere with our swimming. Thanks to the chief having cottages placed at his disposal at both Folly Beach and Sullivan's Island, we did a great deal of it. There were no destroyers in for repairs after a torpedo hit but we had a few of the old World War I ships that had been damaged by gunfire or near bomb misses. These had all come from the Scandinavian or Mediterranean area, the repair yards overseas being full to bursting with casualties. One destroyer skipper was a famous man being one of the very few living holders of the Victoria Cross. He had done something great at Narvik, I've forgotten what, and had a very crumpled leg as a result of it. He could very easily have been retired on account of it but he was the rugged type and preferred to go about in that battered old destroyer picking fights. When his ship was repaired, the Chief and I with several others were invited to go along on the sea trial run. This was especially desirable because everything on the ship was tried out including the depth charges and guns (5 inch fifties I believe they were called) and the experience was gratifyingly noisy. Once the depth charges began going off (we fired at least four spreads), I couldn't help but remember that I had been told by an old Navy man that these tubs were so old and rusty that a fast swimming bass would have no trouble going completely through them. At each explosion, there came a sound as if we had been hit by a giant hammer, and the stern would slew around fully fifteen degrees. The geyser that followed was stupendous. The charges thrown out from the side did not have near the effect on the ship as the stern charge, but were tooth-rattling enough. The guns were not nearly as spectacular as the ashcans, but cotton was passed around and we felt quite in the war as we stopped our ears with it. We were instructed to stand on tiptoe and open our mouths wide as the guns were fired. We greenhorns overdid it and we must have presented a pretty sight with our tonsils bare to the breeze. The machine guns and Bofors antiaircraft fire were distinctly anticlimax after all of this. We were out of sight of land, however, and we felt a certain spice was added by the fact that we were in submarine territory and one might show up. We knew though, that there was little enough chance of this as subs avoided destroyers, even the oldest type, as you would the plague. I don't know how much this little outing cost but it was a thorough test and ammunition was spent prodigally. I will have to say here that this was a close as I came to the war.

I would like very much to know if the Victoria Cross man lived through the war. I sometimes doubt it for I am sure that he took every chance offered. Then too, the classical Victoria Cross man is a dead man.

**England's Queens**

Without indulging in the usual gymnastics of explaining how I finally (after exhausting all other possibilities!) decided upon the subject matter of my paper, I will forthwith tell you that this discourse will be about England's six queens.

At first blush, you may conclude that this is a dry and uninteresting subject, and slump back a little farther in your chair for a real slumber. And I cannot guarantee that you would not be right; but before you do, I would like to call to your attention that all of us owe to our children a certain amount of interest in world history and you can get lots of it by knowing about England's queens, dating from the now-reigning Elizabeth II back to Mary I in 1553.

To give you this knowledge on a platter, I am not going to impose upon your patience by giving a long chronology of their respective reigns. Nor am I going to try to cover all that perhaps should be covered in the regime of my three principal queens, Elizabeth I, Victoria, and Elizabeth II, the new young queen. But let's do have a quick resume of the six queens' places in history.

"Since the 11th Century, England had been ruled by a king, but it wasn't until the 16th Century, in the year 1553, that Mary I, first queen of England, ascended the throne.

When her father, lusty Henry VIII defied Rome and nullified his marriage to her mother, Catherine of Aragon, for a time, Mary had to renounce her royal claims and style herself a bastard. She was an honest, well-intentioned woman, who withered everything she loved and unintentionally fostered what she hated. To please her husband, Philip II of Spain, she enlisted England in a disastrous and unpopular war on France. After five years on the throne, she died alone, deserted by her husband, detested by her people, and nicknamed 'Bloody Mary."

Next was Elizabeth I, who deserves a fuller treatment than some of the others. She became queen at 25 and lived to be 70. She reigned from 1558 to 1603 (45 years). She never married, but do not make the mistake of considering her a typical man-shy old maid. Her accomplishments were reported to be 'many and dazzling'.

One of her historians has this to say: "She was mistress of six languages besides her own, a student of Greek, a superb calligraphist [a penman], an excellent musician. She was a connoisseur of painting and poetry. She danced after the Florentine style, with a high magnificence that astonished beholders. Her conversation, full, not only of humor, but of elegance and wit, revealed an unerring social sense, a charming delicacy of personal perception. This spiritual versatility made her one of the supreme diplomats of history. Her versatile mind, projecting itself with extreme rapidity into every sinuous [bending] shape conceivable, perplexed the most clear-sighted of her antagonists and deluded the most wary. But her crowning virtuosity was her command over the resources of words. When she wished, she would drive in her meaning up to the hilt with hammer blows of speech, and no one ever surpassed her in the elaborate confection of studied ambiguities. Her letters she composed in a regal mode of her own, full of apothegm [a short pity saying] and insinuation. In private talk she could win the heart by some quick felicitous brusquerie [blunt, brusque]; but her greatest moments came when in public audience, she made known her wishes, her opinions, and her meditations to the world. The splendid sentences following one another in a steady volubility, proclaimed the curious working of her intellect with enthralling force, while the woman's inward passion vibrated magically through the loud, high, uncompromising utterance and the perfect rhythm of her speech."

Physically and emotionally, Elizabeth seems to have been something of a phenomenon: she was capable of unusual body exertion, hunting and dancing indefatigably, and would take special pleasure in standing for hours in conference with an ambassador so that he would retire from exhaustion. Yet, she had strange weaknesses, rheumatism, headaches, and ulcers for years. One historian has treated the whole riddle in this manner: "Most of her ailments were of an hysterical origin. That iron structure was a prey to nerves. The hazards and anxieties in which she passed her life would have been enough in themselves to shake the health of the most vigorous; but it so happened that, in Elizabeth's case, there was a special cause for a neurotic condition: her sexual organization was seriously warped."

"From its very beginning, her emotional life had been subjected to extraordinary strains. The intensely impressionable years of her early childhood had been for her a period of excitement, terror, and tragedy. It is possible that she could just remember the day, when to celebrate the death of Catherine of Aragon, her father, dressed from top to toe in yellow, save for one while plume in his bonnet, led her to mass in a triumph of trumpets, and then, taking her in his arms, showed her to one after another of the courtiers, in high delight. But it is also possible that her very earliest memory was of a different kind: when she was two years and eight months old, her father cut off her mother's head. Whether remembered or not, the reactions of such an event upon her infant spirit must have been profound. The years that followed were full of trouble and doubt. Her fate varied incessantly with the complex changes of her father's politics and marriages; alternately caressed and neglected, she was the heir to England at one moment, and a bastard outcast the next. And then, when the old king was dead, a new and dangerous agitation almost overwhelmed her. She was not yet fifteen, and was living in the house of her stepmother, Catherine Parr, who had married the Lord Admiral Seymour, brother of Somerset, the Protector. The Admiral was handsome, fascinating, and reckless: he amused himself with the Princess. Bounding into her room in the early morning, he would fall upon her while she was in bed, or just out of it, and with peals of laughter, he would seize her in his arms and tickle her, slap her buttocks, and crack a ribald joke." And quoting further concerning Elizabeth's chastity, or lack of it:

"She loved them all; so it might be said by friends and enemies; and over the doings of Elizabeth, there hovered indeed a large question mark. Her Catholic adversaries roundly declared that she was Leicester's mistress, and had had by him a child, who had been smuggled away into hiding. But there were also entirely contrary rumors afloat. Ben Jonson told Drummond, at Hawthornden, after dinner, that 'she had a membrana on her, which made her uncapable of man, though for her delight, she tryed many.' Ben's loose talk, of course has no authority; it merely indicates the gossip of the time; what is more important is the considered opinion of one who had good means of discovering the truth - Feria, the Spanish ambassador. After making careful inquiries, Feria had come to the conclusion, he told King Philip, that Elizabeth would have no children. If this was the case, or if Elizabeth believed it to be so, her refusal to marry becomes at once comprehensible. To have a husband and no child would be merely to lose her personal preponderance and gain no counter-balancing advantages; the Protestant succession would be no nearer to safety, and she herself would be eternally vexed by a master. The crude story of a physical malformation may well have had its origin in a subtler, and yet no less vital, fact. In such matters, the mind is as potent as the body. A deeply seated repugnance to the crucial act of intercourse may produce when the possibility of it approaches, a hysterical convulsion, accompanied, in certain cases, by intense pain. Everything points to the conclusion that such - the result of the profound psychological disturbances of her childhood - was the state of Elizabeth. 'I hate the idea of marriage,' she told Lord Sussex, 'for reasons that I would not divulge to a twin soul.' Yes, she hated it; but she would play with it, nevertheless. Her intellectual detachment and her supreme instinct for the opportunities of political chicanery led her to dangle the promise of her marriage before the eyes of the world. Spain, France, and the Empire - for years she held them, lured by that impossible bait, in the meshes of her diplomacy. For years she made her mysterious organism the pivot upon which the fate of Europe turned. And it so happened that a contributing circumstance enable her to give a remarkable verisimilitude to her game. Though, at the centre of her being, desire had turned to repulsion, it had not vanished altogether; on the contrary, the compensating forces of nature had redoubled its vigor elsewhere. Though the precious citadel itself was never to be violated, there were surrounding territories - there were outworks and bastions over which exciting battles might be fought, and which might even, at moments, be allowed to fall into the hands of an assailant. Inevitably, strange rumors flew. The princely suitors multiplied their assiduities; and the Virgin Queen alternately smiled and frowned over her secret."

Now let's bring this lady into focus as to lineage, and her place as queen in world history: She was the daughter of Henry VIII by his second wife, Anne Boleyn. As you may remember from your study of history in school, Anne Boleyn was the most charming and perhaps the most loved of all his six wives. But she had the red-haired Elizabeth instead of a son and consequently was beheaded on account of it, but under charges of a different nature.

Having already told you of Elizabeth's educational background and accomplishments, particularly with reference to her ability to speak numerous languages, etc., it should be mentioned here that the times in the 1500s were something like this: "Government (to the 16th Century Renaissance Englishman) meant far more than the negotiations of politics. It was the science of self-control, self-discipline, self-development. Based on the principle that he who can govern himself can rule over many, it was the foundation of the code of the gentleman, the nobleman, and the Christian.

"Elizabeth was trained, in short, to be a gentleman. And her time held its standards for gentlemen high. A gentleman was a complete man, a human being who had developed to the utmost all his talents as a tribute to Him who had bestowed them. A gentleman was to be a scholar and a man of action, a poet and a scientist, a soldier and a cavalier. It is surprising how many could fill the bill. Down through the ages have come the names of Sidney and Raleigh, Bacon and Essex and Drake, Ben Jonson and Thomas Moore - all of whom met well the exacting demands.

"Perhaps it was because, for the first time in history, any man could be a gentleman. The old feudal barriers of class had melted away, and in the new free society, as in our own nation, a man could rise from guttersnipe to governor, if he chose. The legend of Dick Whittington, Elizabeth's contemporary, is based on actual fact.

"The times of troubles under Edward VI and Mary had left England tired and poor, the people bewildered. Elizabeth saw as her first task the restoration of peace, plenty, and confidence. Restraining the love of lavishness she inherited from her father, Henry VIII, she declared a period of rest, rehabilitation, and economy. For thirty years, England was to know no major war, no unsettling embroilments. Knowing well the heart-quickening thrill of a parade, Elizabeth spent her time touring her country, showing herself in the remotest hamlets, winning the love of her people, the vast majority of whom had never seen their sovereign, had at best merely heard her name.

"For Elizabeth had the personal charm that belongs only to people of great character. How can this charm be defined? One can say, with J. M. Barrie, 'it's that something which if you have it, it doesn't matter what you have'. Because of her charm, people forgot that she was iron-willed, uncompromising, often cruel, a tyrant.

"Yet Elizabeth has many deeds to account for before some judgment bar. She sent her cousin, Mary Queen of Scots, to the block, and her lover and warrior, Essex. She broke faith and nurtured grievances. She stole, she swore, and she lied. She managed, however, to convince the world that she did all these things out of love for her people and on behalf of England.

"The praise that was lavished upon her by the writers she encouraged, whose works may outlive her memory - Shakespeare, Spenser, Marlowe, Bacon, Jonson, Sidney, Beaumont, Nash, Greene, and countless others - makes a cynic wonder whether it was the price they paid for their success, if not their lives. Hardly. These men were popular successes, too, and the people of no age will stand for tributes to a character they dislike. Elizabeth had given them a nation in which they could take pride, had spread the glory of England around the globe, and made the words, 'I am an Englishman,' a passport in every land.

England's fifth queen was Victoria, the second of my three principal queens. To do her justice, I would have to talk for hours because she was such an interesting person. But since Elizabeth II is yet to be discussed, I will try to bring out the highlights of Victoria's lifetime, and leave unsaid many of the points of interest. She was the present queen's great-great grandmother, and was born at Kensington Palace on May 24, 1819. She was the only child of Edward, Duke of Kent, 4th son of George III and Maria Louisa, daughter of Francis, Duke of Saxe-Coburg-Gotha. Her father died before Victoria was a year old and her mother brought her up. It was not until she was 12 years old that she was permitted to learn that she was to be queen. When she was told, she said at once, "I will be good".

Her uncle, William IV died on June 20, 1837 and she immediately followed him on the throne. The coronation took place at Westminster Abbey on June 28, 1838. She was then 19 years old. In February 1840, the queen married her first cousin, Prince Albert of Saxe-Coburg-Gotha. The prince had a difficult position but he carried it off well. He was a student, philanthropist, and a businessman, and the people respected him.

Strachey, in his fascinating book, "Queen Victoria" clearly shows that the power of the crown steadily increased in England from 1840 to 1861; from 1861 to 1901, it steadily declined. The first process was due to the influence of the Prince Consort, the second to a series of great ministers.

Victoria and Albert had four sons and five daughters. The eldest child, Princess Victoria, married the Crown Prince of Germany.

Victoria ruled for 63 years, which was the longest reign of any British monarch. She became queen when the people neither liked nor respected the throne. But being above reproach, she raised the throne to a position of respect and veneration. Victoria was a capable monarch, but the greatness of her country was due more to such ministers as Sir Robert Peel, Lord Palmerston, Disraeli, Gladstone, and Lord Salisbury, than to the queen.

Great Britain was a Constitutional Monarchy, and Victoria, while exercising her powers to the fullest, could only warn, consult, or encourage the Prime Minister.

After Prince Albert's death in 1861, Victoria withdrew from social activities and dressed in mourning for many years. In 1887, the people of the empire celebrated the golden jubilee of her reign. She appeared in public for the first time. Ten years later she celebrated her diamond jubilee.

She died at her winter home on the Isle of Wight, January 22, 1901.

Now we come to England's sixth and present queen, Elizabeth II. I have recently read a book by Marion Crawford, governess to Margaret and Elizabeth since they were practically babies. The book, "Elizabeth the Queen", was published this year and covers the life of Elizabeth II up to and including the recent death of the King, the notification of Elizabeth and her husband, Prince Philip, in Africa of the King's death, and their return to England, and her accession to the throne. You may have recently read that an official announcement says the coronation will take place in June 1953.

From reading this book, I learned that Elizabeth is considered to be a woman of "dignity, nobility, charm, and above all, simplicity". She is now 26 years old and her training, since she was 12 years old has been based on the possibility that she would become queen. After reading the book, I feel convinced that Elizabeth has the proper training, and above all, the sense of responsibility which is required to make a good and proper queen. She apparently has her "feet on the ground," and is determined to serve her people to the best of her ability, which is considerable. She is married to the prince of her choice, has a male heir, three years old , and a daughter, 1 year old; is widely traveled, has served in her father's place on more than one occasion, and as princess has performed numerous Royal Duties. When she was 21 she said, "I declare before you all, that my whole life, whether long or short, shall be devoted to your service and the service of our great imperial family to which we all belong".

There is probably no girl or woman, who, at one time or another, if she ever read fairy tales, did not think it would be wonderful to be a princess and later a queen. And of course, there are numerous privileges and luxuries involved. But as "Crawfie" as the author, Marion Crawford, was called, says, she could have aptly titled her book, "A True Story - A Bird in a Gilded Cage", or "The Prisoner of the Palace".

"Every minute of Elizabeth's time - even as a princess - is scheduled from morning to night and seldom can she suddenly decide to go to bed early with a book, or take a weekend in the country, like so many of her subjects have the privilege of doing. Her schedule is written out, sometimes many months in advance, divided into three divisions: Morning, Afternoon, and Evenings, each division containing those functions she is committed to attend. Regardless of mood or health - and the Royal Family feels it cannot honorably have poor health - their job is to appear and be the center of all eyes. Sometimes the round of such appointments are as high as six or seven in one day and since such duties come up not once or twice a week but every day of the queen's life, there is little chance of real relaxation which ordinary people have. And too, the queen is not free from money problems. Her allowance is debated in the House of Commons. The Royal Family has a certain amount of money appropriated for its use each year, but the costs of running a Royal household is naturally enormous, for the British certainly expect the queen to live in a manner befitting a queen, and this, by necessity, is most costly. For instance, some banquets put on to entertain visiting dignitaries, cost the Royal household as much as 3000 pounds ($3.00 per pound). All such entertaining is done as a matter of duty and yet the Royal Family has to suffer the embarrassment of having their allowances debated publicly."

Still, Elizabeth is one of the world's wealthiest individuals. Your favorite weekly news magazine dug up some salient facts: "Although a monarch's private holdings (and will) are unpublished, the crown jewels are estimated at up to $140,000,000, and Buckingham Palace's gold dinner service at $10 million. It is impossible to price-tag the private estates at Balmoral and Sandringham, the library of Windsor Castle and the art treasures of Buckingham Palace. The queen owns 600 of the Thames River's 800 swans, all sturgeons and whales caught in the home waters, the land around the perimeter of the islands between high and low tide, all gold and silver mines in Britain (there are none to speak of), all treasure trove in Britain, and the exclusive right to search for oil in the United Kingdom.

"She is entitled to an annual ground rent of one snowball from the Munroe of Foulis, and a white rose from the Duke of Atholl. The Royal real estate holdings are enormous; estates in Dorset, Wiltshire, and Somerset, beaches in Cornwall and Devon, 100,000 acres of farmland, immensely valuable land in London (the south side of Piccadilly Circus, both sides of Regent Street, two theaters, three restaurants, and the Carlton Hotel). But Elizabeth 'owns' these properties only nominally. They are administered by Crown Commissioners for the benefit of Parliament, under a bargain struck with George III in 1760. In return, Parliament will vote Elizabeth the Civil List, under which her father received $1,148,000 a year. This may be increased for Elizabeth. Whether her husband will get a separate allowance is still to be decided. Elizabeth will also get the revenue from the 50,000 acre Duchy of Lancaster (about $280,000 last year). As queen, she pays no income tax."

Now let's take a quick look at the Rights, Powers, and Duties of the queen. According to a famed British constitutional scholar, "the queen can disband the army; she can dismiss all the officers; she can sell off all ships of war and all naval stores; she can make peace by the sacrifice of Cornwall and begin a war for the conquest of Brittany. She can make every citizen in the United Kingdom, male or female, a peer; she can make every parish in the United Kingdom a 'University'; she can dismiss most of the civil servants; and she can pardon all offenders."

"Queen Victoria, in whose reign this constitutional authority was writing, exclaimed, ' OH, the wicked man! To write such a story!' Elizabeth might feel the same way, for as every loyal subject knows, the British Constitution cannot be understood by people who think it says exactly what it means. The monarch's will is presumed to march with the will of her ministers. Elizabeth's actual rights as a queen are only three:

* The Right to be consulted by the Prime Minister.
* The Right to encourage certain courses of action.
* The Right to warn against others.

"She calls a party leader to form a government, but the person she designates must command a majority in the House of Commons. (George III was the last monarch to summon and dismiss ministries at will.)

"Elizabeth's power to grant or refuse a dissolution of Parliament is real enough, but she would use it independently only in extraordinary circumstances - e.g. if death or strife hopelessly entangled the wheels of party government."

What she must do. "Personifying the authority she cannot wield, the queen has duties that far exceed her powers, and must sign thousands of papers. She enacts laws by and with Parliamentary assent, appoints judges and magistrates who act in her name, confers titles and creates peerages. She is supreme head of the Church of England and the Church of Scotland, which makes her an Anglican south of the Tweed and a Presbyterian north of it. She is guardian of infants, idiots and lunatics. (The Lord Chancellor actually does this job.) If a condemned murderer should be pardoned, the Home Secretary will tell her so. (George VI conscientiously read up on capital cases, but often discussed the case afterwards with the Home Secretary.)"

What she can do. "If she pleases, she can ride in a horse carriage down Rotten Row, where others can only ride horseback. Her picture will appear on postage stamps, but she will not need them; her personal mail is franked. She can drive as fast as she likes in a car which needs no license number. She can tell her sister, Margaret, when she can marry, and will surely advise her on whom to marry. She can confer Britain's highest Sovereign decoration, The Order of Merit - one only in which the Sovereign retains freedom of choice."

What she can't do. "Elizabeth cannot vote. Nor can she express any shading of political opinion in public. The last monarch who did that was George III, who, in 1780 personally canvassed Windsor against the Whig candidate Keppel. Elizabeth cannot sit in the House of Commons, although the building is Royal Property. She addresses the opening session of each Parliament, but she cannot write her own speech. She cannot refuse to sign a bill of Parliament. She cannot appear as a witness in court, or rent property from her subjects."

Now I would like to tell you something about the new queen's husband, Philip, Duke of Edinburgh. He like best his title, or rank, in the Royal Navy of Lt. Commander. His father was the brother of King Constantine of Greece and in 1922 was banished from Greece by a revolutionary junta. The family took up exile in Paris - but with rather meager financial means. Nevertheless, they sent Philip to a preparatory school in England and then to Germany and Scotland. He spent most of his vacations with his Royal Navy uncles, the Marquis of Milford and Lord Louis Mountbatten, seldom seeing his parents who were living separate lives. In fact, his mother even now is a religious recluse on the Aegean island of Tinos. Philip came out of Dartmouth Naval College as a midshipman in 1939 and in due course as a lieutenant served as an aide-de-camp to uncle Louis Mountbatten and as such was present when MacArthur accepted the surrender of the Japanese in Tokyo Bay.

To make a long story short, Philip is now top man in the British Royalty and is regarded by the English as a sort of regular fellow who is fully capable of handling his job as Prince Consort if he is officially designated as such. Here is an incident which I found in a monthly magazine which will give us an insight into Philip's make-up: "On the occasion of a town council luncheon, one of many such ceremonies which will go on for the rest of his life, he abandoned his formal reply to the address of welcome and reminisced about a previous visit to Edinburgh.

"'A hospitable Lord Provost stood us dinner one evening before the night train to London." the Duke said. 'We discovered the train was twenty minutes late. The Lord Provost offered us one for the road. He rushed around, filled up our glasses, and then we discovered the train was another 20 minutes late. This continued for some time, and we eventually decided the train was six drinks late. Many citizens of Edinburgh were surprised to see the Lord Provost and myself on such good terms as we made our way to the station.'"

In order that you may have a clearer picture of Philip's capabilities as the husband, and undoubtedly adviser, of a queen, I think you should know these facts:

"For the past four years, Philip Mountbatten has been engaged in a strenuous effort to live a double life: in one role as a career naval officer, now advanced to the rank of lieutenant commander; in the other as Duke of Edinburgh and the future prince consort of a woman who is his wife, Queen Elizabeth II."

There were qualms in the British Royal Family about Elizabeth's marriage to a little-known Greek prince. Shortly before the public announcement of the betrothal in 1947, Mary, the queen mother, warily inquired of a confidant, "will it be a success?”

The young couple seem to be answering the query wholeheartedly in the affirmative by their evident enjoyment of family life. But there was a hint of another subtler question in the mind of the Old Lady of Marlborough House. Would Philip himself be a success?

The husband of the British queen enters a constitutional vacuum which only his own strength of personality can fill. His only obligatory right and duty is to be the husband of the queen. Philip has already adequately discharged the more urgent of his vaguely defined duties to the State by doubly securing the direct succession to the throne. But if he chooses to serve a sterner apprenticeship, he may determine the character and tone of a reign, shape its moral and cultural pattern. In Victoria's Prince Albert, Philip has an awesome and intimidating precedent, a predecessor who so deeply rooted the standards of Victorian civilization that even today, after a century of battering by war and economic crisis, many Englishmen still look back to them as monuments of a lost golden age.

His Royal Highness Prince Philip bears with aplomb the ponderous historic honors placed on his shoulders. He is now Knight of the Garter, Duke of Edinburgh, Earl of Merioneth, Baron Greenwich. But he possibly sets higher store on this Royal Navy rank of Lt. Commander, achieved just before he took command of HMS Magpie, an ack-ack frigate, after eight plodding years of mere lieutenancy.

"Philip has made a determined effort to prepare himself for a more useful function in society than that of a glorified courtier. His address to the British Association for the Advancement of Science last August marked his shift from the Navy to wider public activity. His theme was academically described as 'The British Contribution to Science and Technology in the Past Hundred Years'. But there was little that was academic about Philip's speech, sweated out on signal pads during his last weeks aboard the Magpie. It developed into a crushing rebuke of British industry for failing to make use of scientific brains to modernize itself and so compensate for the decline in physical resources for the country's chronic economic ills.

"Philip looks startlingly alive, and his blue eyes disclose a keenly quizzical intelligence. He flashes an impromptu grin at a swooning crowd of shop girls, playfully prods an infant prince before the upraised eyebrow of the public camera. A gillie at Drumlanrig Castle, a weekend haunt of young royalty, overheard Philip dismiss Elizabeth, reluctant to join him in a walk through a highland drizzle, with a mixture of marital exasperation and endearment, 'All right, you silly old sausage! Go home by yourself!'

"Britons have barely grasped the significance of a royal personage who has lived pretty much the same life and fought the same war as their own sons. It is a dramatic discovery for them to find that Philip, who has been in turn a plain 'snottie' (midshipman) and 'Jimmy the one' (first lieutenant) in the junior hierarchy of the Royal Navy, remains a human being in spite of his sudden elevation ashore. Philip, with the indispensable aid of his wife; stands more than an even chance of becoming, in his own way, as respected an influence on British life and affairs as Victoria's Albert.

**Genetics**

Of late years many areas of science have been brought through the iron curtain of average man's indifference.

That indifference has been - and is - lessening considerably. The advent of the bomb and the rather abruptly dawning realization that another country, very large and hungry, is snapping at our heels (or we at theirs) has aroused interest in goings on long hidden in ivory towers and in the jargon of graduate school professors. This has prompted the free-lance writers, many of which infest this country, to lend their dubious talents in this field toward a better understanding of the problem by outsiders.

By and large, their results are not good. However, certain periodicals and publishers of popular edition books have been able to present the work of genuine large brain types, some of whom appear to enjoy writing for the mentally second class and who have a knack for occasionally getting an idea across.

One of the fields which has reared its head is Genetics. I don't say that a great deal has been done in this field to bring knowledge down to our level, that is to give us definite information as to the possible increase in harmful mutations which might result if lethal defects, or worse still, the possibility of viable monsters inheriting the earth. At least there has been a start. It has been estimated that only one in some 600 mutations results in improvement of the breed. These odds, even so, result in improvement over an immense period of time, especially was this true until comparatively recently. Now, however, in a humane civilization where Darwinian unfits are protected and allowed, even encouraged, to breed, however slowly, such an economic and moral burden is placed on the normals that it is conceivable that so large a part of their time will be spent supporting these people that the economy and even the civilization will collapse. A rebellion may come at some point and the innocent be gassed but even this may be counted as a collapse of all we believe in. We certainly cannot evaluate the threat that hangs over us when such men as Edward Teller and Linus Pauling are so far apart in this belief as to what might be expected in nuclear testing continues. For myself, I can only remember that just one in 600 mutations is beneficial and have gone along with Linus in feeling that we would be better off if people would stop exploding the things somewhat euphemistically called nuclear devices.

In doing a little reading about the present evolution of man in preparation of this report, I became more confused than ever and wound up some little distance from the point I originally aimed at. For one thing it appears that some geneticists believe that it is chiefly through mutations that evolution has come about. Others are positive in their belief that always in a population, at least before the era of widespread radiation, there were a varying number of individuals who were basically equipped genetically to meet any immediate dangerous situation because of the vast number of latent traits already present in our array of genes and not through adaptation by mutation of genes. This is what I gathered from my reading - I may be wrong and I haven't run across a geneticist lately who might enlighten me. I would like to know if there is one hereabouts. I remember very little that I absorbed of this matter in college but I had always thought that the second view expressed above was the accepted one. I am sure that the fact of mutations was discussed but I remember nothing of it. Of course, the mutations concerned were the so-called natural or spontaneous ones but apparently the same ratio of good to bad obtains in those brought about by artificial mutagens such as very short-wave electromagnetic radiation, x-rays, and gamma rays, and certain chemicals which are used in medicine for treatment of a number of conditions. Man has always been exposed to cosmic rays and emanations from the earth which may explain the natural mutations. Ordinary brick and concrete emit a detectable amount of ionizing radiation and a certain amount of background radiation is always present and has to be allowed for when counting ionizing emanations. A Geiger counter anywhere on earth will click occasionally in the absence of any so-called radioactive material.

A man named Dobzhansky, who I have assumed is one who believes mutations are most important in evolution, states that many mutations produce hereditary diseases but many genes which in a single state are beneficial, do in the double state produce disease. He cites sickle cell anemia as one of these. If only one pair of genes has the sickle cell, it appears that the carrier of that gene is rendered more immune to malaria. This is beneficial in the lowlands of Africa where malaria is widespread. There may be many more situations in which single mutant genes may behave equally beneficially. He is not certain how often this happens but he seems to think often enough to be important.

He also speaks of minor genetic variations such as long or short nose, blonde or black hair, type "A" or type "O" blood. He speaks of these as "apparently neutral traits," neither good or bad but he carefully points out that they may have some occult effect about which we know nothing. It does seem that people with type "O" blood have a slightly higher rate of duodenal ulcer. It may appear therefore, says he, that type "O" blood is bad but on the contrary, it may in fact confer some advantages as yet undiscovered. Apart from genetics and evolution, it does help in a special way because a type "O" can almost always get enough blood in an emergency, whereas a type "AB" for instance, won't be so likely to find enough and may die in consequence. Apropos of those minor traits, it is interesting to speculate on how different races developed different facial characteristics. The Mongolian face, for instance, with eyes deeply set in protective, fat-lined lids, flat nose and forehead, and broad, padded cheeks is ideally suited for frigid weather. It is felt that these features developed during the last glacial advance among people trapped north of a ring of mountain glaciers in Asia and subjected to fierce cold. Those not having these features or who lacked the inherent traits to develop them were rapidly weeded out by pneumonia and other infections of the respiratory and accessory apparatus. Of interest also is that while it is, I think, generally agreed among anthropologists that the American Indian is of this Mongolian stock, their features are different in several ways. They have a lid crease and the classical Indian is hawk-nosed. This is accounted for by the fact that the migration over the Bering Strait took place before the glacial entrapment mentioned above. The Eskimos, on the other hand, who are the representatives of a later migration show the full-fledged modern Mongolian face.

Modern man, however, has so modified his environment with artificial influences and protection from the effects of natural hazards (preventative medicine, the antibiotics, and so forth) that geneticists have asked themselves "Is natural selection still operating in mankind and can it be trusted to keep man fit to live in environments created by his civilization?" Before they go into this matter, they would have us understand their meaning of certain terms. Natural has to do with influences in environment whether man-made or not. Also, they say that such phrases as "the struggle for life" and "survival of the fittest" in the Darwinian sense do not connote violence, warfare, and competition, but rather quiet adjustment such as growing heavier fur against cold or reducing the evaporating leaf surface against dryness. Those who point to the victor in actual strife of any kind as the fittest, take a very shallow and short view. The so-called struggle for life is directed against circumstances and things not against fellow animals. They forget that small rodents inherited the earth from the dinosaurs, not by killing or enslaving them but by having characteristics better fitted to the environment. The rodents are, of course, still with us and thriving and may inherit again.

Fitness also has rather special meaning in the Darwinian sense. Biologists speak of Darwinian fitness in a reproductive sense. An example is Achondroplastic Dwarfism which is common enough for all of us to have seen at least one example. These people may grow up and enjoy good health but it has been shown that they average only twenty surviving children for every hundred children produced by their normal brothers and sisters. Thus, the Darwinian fitness of Achondroplastics is 0.2. It may be disappointing to the romantics but the surviving fittest is not the legendary hero but drably enough simply the progenitor of the largest number of surviving descendants.

The question of whether or not natural selection is still going on is answered by the statement that it could be said to have stopped only if all adults married and had the same number of children and all the children survived and married and had the same number of children and so on.

Man has injected certain influences which have altered the selective pressure for or against certain genes. Biologists are disturbed by the fact that we are, as mentioned above, protecting possessors of bad genes and therefore propagating them in contravention of natural selection. We are, therefore artificially increasing the Darwinian fitness of these unfits. Since the effect of civilization is to increase mutations, this means that we are increasing the harmful genes at a rate of 600 to 1 and protecting and propagating them when they appear in the population. To render the picture more complicated, you will remember that there have been instances of genes which in double dose are harmful but singly confer some advantages. If the low-level blacks in Africa had decided to breed out the sickle cell or bad gene, they may all have succumbed to malaria. There may be many more which are unknown. We are a long way from controlled breeding but we are quite as far away from complete knowledge of what is all good and all bad in the matter of genes.

Some years ago, using the families of those listed in "Who's Who In America" for comparison, it was found that they had fewer children than the general population and were, therefore, by definition less fit. This is changing for the better apparently, but may be due to the relative infertility of low-grade mental defectives. Channeling the libido toward higher things, in short sublimating, may partly explain this phenomenon of infertility in the prominent.

It is also noted in reference to good and bad characteristics that qualities making for successful individuals are not necessarily those most useful to society as a whole. Dobzhansky says that if there were a gene for altruism, natural selection might discriminate against it on an individual level but favor it on the population level. He says that in that case the fate of a gene would be hard to predict. The surviving fit in human societies may in some circumstances be those with the strongest fists or the most extreme ruthlessness. However, cooperation has a long and honorable record and it appears now certainly as much as ever before that therein lies our salvation and without it very likely our destruction.

To quote Dr. Dobzhansky further, "Yet man is the only product of biological evolution who knows that he has evolved and is evolving further. He should be able to replace the blind force of natural selection by conscious direction based on his knowledge of nature and on his values. It is as certain that such direction will be needed as it is questionable whether man is ready to provide it. He is unready because his knowledge of his own nature and its evolution is insufficient; because a vast majority of people are unaware of the necessity of facing the problem; and because there is so wide a gap between the way people actually live and the values and ideals to which they pay lip service."

The above quotation calls for a search for some shred of hope that man will have enough insight to stop stacking the cards against himself, that he will indeed consider the future in terms of the common good and not as he has always done in terms of acquisition of purely material things for his own pleasure and aggrandizement. Here too I might mention bigotry but then the reminder of the lip service mentioned above is too painful for me to long consider it. If it were not painful, I would stand proven a greater bigot than I am.

The mechanism by which we may be saved cannot be the slow inefficient and painful way of genetical evolution, if indeed this would ever do it. We must change but we cannot wait for the mutations and weeding out of genes which may indeed never come. We may be thwarting biological evolution by nurturing the unfit but the gain in moral values in having pity on those less fortunate may indicate that a second and more important form of evolution is within our power to control.

Man is undergoing a non-genetical form of evolution that does not follow the Darwinian pattern. Once it was believed (and still is by a few) that the two kinds of evolution were successive episodes of a continuous process but according to Doctor P. B. Medanear, an English biologist, it is not only reactionary but criminally wrong to supinely assume that we must fight and kill or accept man's monstrous selfishness as the way of nature against which we are helpless. In an article in the Saturday Evening Post he says, "I shall try to show that this newer non-genetical evolution of mankind based upon certain properties and activities of the brain is governed by no laws other than laws we make or have made for ourselves and that we cannot evade our responsibilities by pleading that we are at the mercy of nature."

In a rather long and complicated prelude to the body of his argument, he compares the responses of the genetically limited and the intellectually unlimited systems respectively to the juke-box and the record player. One can only get out of a juke-box what is already in it. You push a button and a specific record is played. You cannot teach it anything, that is you cannot instruct it to play anything with which it is not already equipped. On the other hand, this intellectual system with which he deals can be instructed, its responses can be changed. We can put into and get out of it what we wish to put in and get out. In a sense we can teach it what to play if we will.

The Lamarckian theory which states that acquired characteristics can be inherited, that genetical instructions can be issued to living organisms, has been disproved over and over again, but I remember that the Russian biologist Lysenko, a strict party liner, argued the point some years ago before a world gathering of scientists to the general disgust of the assembly. I believe it was generally thought that he said what Moscow wanted said and not what he actually believed. I have not heard what became of Lysenko but he held forth in the Stalinist era and has probably been publicly denounced along with his boss.

Medanear uses an example of bacteria to make use of an unfamiliar substance as food or at least to break that substance down into components harmless to the bacteria. It was at one time referred to as training of bacteria to develop the new ferments necessary to this process. The implication being that the new substance taught the bacteria to manufacture the new opposing substance. However, a bacterium as any other living organism can synthesize only those substances that it is genetically entitled to synthesize. The process of so-called training only brings out a potentiality written in the genetic make-up of at least one of the members of the group that is challenged. There are many more examples that could be mentioned but according to Medanear no matter how promising for the Lamarckians a set of circumstances might at first seem to be, the finale would bring further support for the opposition.

It would be wonderful if the environment could be made to act in an instructive instead of an elective way. It would make it possible for organisms to evolve much more efficiently but apparently it can't be done.

Medanear goes on to say that in contradistinction to the impossibility of genetic instruction by environment there is one organ that can accept instruction from the environment - the brain. What the genes do for the body, the brains should do for the soul. This organ began as a device for responding electively to stimuli, that is instinctively. Much later on the higher parts of the brain became able to respond to instructive stimuli. We began to learn. Later still we became capable of handing these instructions on by custom and tradition and word of mouth and eventually by the written word. This is also a biological evolution, this social, cultural, and technological change but it differs from the other in being non-genetical. Rather facetiously, Medanear refers to some of the similarities between the two. Great airships such as the Macon and the Hindenburg are likened to the dinosaurs and have like them died out while airplanes have become fixtures. Toothbrushes have retained the same design for a hundred years. Also, we can see the technological counterparts of vestigial organs - how else he says would you describe buttons on a man's coat cuff. All the similarities between the two systems are superficial, perhaps not so much as these humorous ones, but enough so to render a study of them sterile so far as great lessons are concerned.

As a matter of fact, this particular biologist is inclined to be derisive when speaking of genetical evolution. He says, "It is a profound truth realized in the nineteenth century by only a handful of astute biologists and by philosophers hardly at all, a profound truth that nature does no know best; that genetical evolution if we choose to look at it liverishly instead of with fatuous good humor, is a story of waste, makeshiftness, compromise, and blunder."

He documents his thesis by pointing out such perversions of the bodily defense mechanism as Rh incompatibility, in which he describes the situation as that of a mother immunologically repudiating her unborn child, anaphylactic shock in which the defense mechanism is apt to kill rather than save the defended, the destructive effect of these defenses on tissues of the individual possessing them as occurs in the thyroid gland in Hashimoto's disease and certain inflammatory diseases of nervous tissue and the failure of homogenous tissue transplants except in the presence of agammaglobulinemia or in identical twins. He does say that this latter situation is an artificial one and he does not, therefore, include it but he mentions it.

We can then according to this man improve on nature. If any man says that this course or that course of action or inaction was the life that was authorized by nature and intended by nature as the course for us to follow, he would have no proper conception of nature. I quote, "People who brandish naturalistic principles at us are usually up to mischief. Think only of what we have suffered from a belief in the existence and overriding authority of a fighting instinct; from the doctrines of racial superiority and metaphysics of blood and soil; from the belief that warfare between men or classes of men or nations represents a fulfillment of historical laws. These are all excuses of one kind or another and pretty thin excuses. The inferences we can draw from an analytical study of the differences between ourselves and other animals is surely this - that the bells which toll for mankind are, most of them anyway, like the bells upon Alpine cattle; they are attached to our own necks, and it must be our fault if they do not make a cheerful and harmonious sound."

**World War I**

Contrary to physical evidence, I am not old enough to have fought in World War I. Hostilities began a few months before my 10th birthday, but I was old enough to be entranced by it all and to remember at least some high points. However, the general feeling of the older people I came in contact with, my parents primarily of course, modified my romantic view of the thing.

At the beginning, my father was at some pains to let it be known that he favored the Germans and felt that they would have little trouble with the French. Inasmuch as 99% of other people felt that Germany was the bad guy I had many difficult experiences with my friends and a good many strangers. I don't know whether he actually felt that way or simply decided that such a stand offered for more opportunity for loud argument. Fortunately, he soon changed or I would have had to quit school. Life at recess was getting pretty rugged.

Kings and queens, archdukes and such-like were commoner in those days and such areas as Serbia, Bosnia, Herzegovena and Montenegro as well as Austria-Hungary were well advertised by song and story and were the locale for many romantic plays and novels. I probably would not have paid any attention to them being as I was of an age, except that my friend Richard Harris was an ardent stamp collector and his tastes ran to the issues of these smaller countries. They were beautiful and it seemed a great deal of effort was devoted to offsetting the unimportance of the state by the super-quality of the stamps which generally, as I remember, carried the likeness of the king or queen or grand duchess as the case might be.

While these harmless going-on were being pursued, the politicians along with the kings and queens etc. were engaged in much more serious endeavors such as paying off old scores or conspiring to increase the prestige of their countries and consequently themselves at the expense of someone else.

Since 1870 and the blitzkreig defeat of France, Germany had become increasingly loud-mouthed about its "place in the sun", the innate superiority of the German people, the need for expansion, and hurt indignation that all this was not readily conceded by other people. They had as chief spokesman Kaiser Wilhelm II whose public and semi-public remarks kept the diplomatic corps in a constant state of cold shivers and did very little to endear the Germans to their neighbors.

Furthermore, William considered himself a past-master of military as well as political strategy. He had fired Bismarck, the architect of German power, and he dictated to the military chiefs. He browbeat Von Tirpitz, the naval head, and would have done the same to Von Moltke, General Staff Chief, except that he was the nephew of the von Moltke who whipped France so roundly and consequently enjoyed some immunity from interference and criticism.

France still suffered the intolerable memory of 1870 and awaited with some impatience the day when she would meet Germany again. Economically and in prestige as a great power she had recovered rapidly and handsomely from that low point in her history and in addition enjoyed the friendship of neighboring countries - or as much friendship as is possible between intensely nationalistic communities. However, she was a democracy and it was pretty generally held, among the continental countries at any rate, that democracies were to be despised. This feeling was especially violent in Germany.

England rather looked down on everybody and while at times she was capable of admirable loyalty, between those times one gets the idea that she felt that the whole world could go to hell providing of course it wasn't to hell in a body, and not with one nation emerging which might be strong enough to give trouble. Britannia was especially touchy about her role as waves ruler and she could get very stirred up about other nations' fleets. She was watching with considerable concern the growing German sea power which, while comparatively new, was rapidly becoming formidable. France and England had been enemies for centuries but had joined hands along with Russia in a rather loose entente. This had been accomplished almost singlehandedly by Edward Seventh who felt very strongly about the Balance of Power and the necessity of having something to offset the alliance between Germany, Austria-Hungary, and Italy.

He visited France in 1903 in spite of warnings that his reception would be a cold one. It was indeed a cold one, the citizens being sullen and silent except for occasional shouts like "long live the Boers". Before he left, however, he had completely devastated the French and they were referring to him as "our king". The man was fantastic in his ability to charm. In 1904 the Anglo-French Entente was signed. It probably would have been effected later anyway, but the path was smoothed by Edward.

Russia had, in 1904, been beaten by small Japan in which war the insincerity of the latter in every department was amply demonstrated. England had an "understanding" with Japan which further alienated Russia, already disliking England as her Crimean foe and opponent in her ambitions in the Balkans. However, because of European political pressures and at the urging of France, an understanding was also effected with England in 1907. I don't know when the Franco-Russian agreement was entered into, but I feel sure it came about because of fear of Germany and the presentation to Germany of the possibility of a two front war of which she was very much afraid.

Austria-Hungary and Italy were the other two participants in the Triple Alliance, but were so overshadowed by Germany that they were very junior partners.

All of the European Powers had battle plans drawn, directed at their most important enemy, but the only two of importance in the situation discussed here were those of Germany and France.

The author of the German plan was Count Alfred von Schlieffen, Chief of the German General Staff from 1891 to 1906 and, as were many others, a disciple of Clausewitz whose principles of the conduct of war were probably studied in all the staff colleges in the world.

Frontal assault was anathema to Schlieffen, and his plan involved as little risk of it as possible. Flanking and envelopment were the method and aim proscribed by him. He envisioned a broad door-like sweep through Belgium, touching the channel and with the door gradually closing on Paris as its goal on the perimeter thus flanking and rolling up the French to the West or East of Paris. The crux of the plan was that the German right be made strong at the expense of other segments and that on the left only a holding action be required until the French were weakened. He repeated this over and over and it is said that as he died, his last words were, "only make the right wing strong". Also important to the plan was the estimate of the General Staff that in case of Russia's entry, six weeks would elapse before she could mobilize her forces. By the German time table, France would be crushed by then and the Western army free to deal with Russia.

The French plan on the other hand was based on her belief in the strategy of attack and attack, frontal or any other way that presented itself, but first, last, and always attack. This idea guided all her training for officer and man alike and those who would mention such a thing as retreat, strategic or otherwise, were considered as inferior material and subversive to the morale of the army. These men and ideas were not tolerated. (I may say here that much of the historical material was found in Tuchman's "The Guns of August" which seems generally anti-German and sometimes rather dogmatic on points which might admit of slight differences in interpretation, but it is considered an extremely well-documented presentation.)

Although one wonders at the almost complete neglect of methods other than attack in the French conduct of war, it must be substantially the case. The attack concept was based on their belief in the superiority of the French soldier in "élan", "l'esprit élan", the latter, according to Tuchman being translated as guts. It was maintained that the soldier who endured longest was the victor. This is certainly true but it seems also true that a little rest at strategic times might contribute to endurance. Their plan then was to attack through the center of the enemy line in the vicinity of Ardennes and somewhat east, split the enemy, and in the resulting disorganization, envelope and destroy him. They had of course heard of the Schlieffen Plan but were not sure it wasn't a trick and at any rate if it were true the more the Germans strengthened their right, the weaker would be their center and left.

England had no plan and did not have a conscription law. She maintained enough of a regular army to guard her coasts but these were few as she depended on her navy to protect her.

All of the large countries contiguous to Belgium, including England, were signatories to a treaty guaranteeing the Belgian frontiers. The treaty provided that in the event of invasion, the other signatories would be at war with the invading country.

All was in readiness for European conflict. The only question was when. Von Moltke, in July of 1914, said that from then on, "any adjournment will have the effect of diminishing our chances of success". On June 1st he had said, "We are ready, and the sooner the better for us".

On June 28, 1914, Archduke Franz Ferdinand of Austria was assassinated by Serbian nationalists at Sarajevo while on a state visit to that country - Austria-Hungary - with, to quote Tuchman, "the bellicose frivolity of senile empires", determined to use this as the occasion to annex Serbia as she had done with Bosnia and Herzegovena in 1909. The ultimatum to Serbia on July 23 was followed by assurances by Germany to Austria of their support if Russia was disposed to object. Russia's own ambitions in the Balkans made any such action as that of Austria's extremely distasteful to them and they could be expected to react.

In spite of Serbia's answer to Austria's ultimatum which in the Kaiser's own words, "dissipates every reason for war", war was declared by Austria on July 28th and Belgrade was bombarded. On that day, Russia mobilized on her Austrian frontier and on July 30th, Russia and Austria both ordered general mobilization. On July 31st, Germany issued an ultimatum to Russia to demobilize within 12 hours.

So suddenly and with such smashing effect did these events and their implications strike the chiefs of state that frantic last-minute efforts to stop or at least postpone the conflict were made, but so complex were the military plans and schedules that the Juggernaut, once rolling, could not be stopped, much less reversed. These men who had been prepared for years were so awestruck by what had been unleashed that they were utterly appalled and equally helpless. A plan to keep France neutral at least for a time was offered by one of Bethmann's colleagues, but Bethmann was a man who "meant well feebly", as Roosevelt said of Taft, and instead of this offer, a brutal ultimatum was presented to France. An erroneous report by the German ambassador in London seemed to offer a chance to keep both England and France neutral. The Kaiser himself tried strenuously to follow this through and in great haste, for the invasion of Luxembourg, whose neutrality was also guaranteed by the fine Great Powers, was scheduled for just one hour after the receipt of the ambassador's letter.

This invasion would automatically bring in France and England. In a stormy session with Von Moltke, the Kaiser was told that plans could be altered only with great danger to the country. Von Moltke claimed that this interview so disturbed him that he was never the same again. Shortly after a message from Lichnowski, the ambassador involved admitted that he had raised false hopes. The invasion of neutral territory, which was to have a far greater importance than Germany dreamed of, proceeded.

Meanwhile, France, not really thinking that Germany would invade Belgium - but hoping she would - was making every effort to persuade England to commit herself and to inform France as to what she could expect of her. England was rather difficult to pin down and France knew that to be able to count on her, there could be no doubt as to who was the aggressor in her war with Germany. The French Ambassador had to report that the situation so far was, "of no interest to Great Britain". To avoid even the appearance of aggression, France withdrew her standing forces 10 kilometers from the frontier and delayed general mobilization so long that Marshal Joffre was reduced almost to tears, and he as impassive a character as could be imagined. Authority was at last granted at 3:30 in the afternoon of August 1st.

Meanwhile, after many direct and indirect statements that Belgium had nothing to fear from Germany, at 7 pm on August 2nd, the German ultimatum to Belgium was delivered. The note contained the completely false excuse that French troops were advancing toward the Belgian frontier and without doubt were preparing to invade - this in the face of the risky 10 km withdrawal by the French. Early on the morning of August 3rd, Belgium's reply was given. It was a firm "no!” King Albert however refused to request aid of England and France until the invasion was actually a fact.

At two minutes past 8 on the morning of August 4th, the Germans crossed the Belgian border at Gensmerich. They assumed that Belgian resistance would be token only and for the sake of honor. They were greatly surprised therefore when they found bridges above and below Liege destroyed and their crossing made extremely difficult and lethal by the spirited defense of the Belgians. It was here that the brutal shooting of civilians and other atrocities began and which were to lose for Germany any lingering sympathy she might have had in the world. Her policy of frightfulness which was intended to cow the enemy into abject submission had quite the opposite effect. This fact still had not soaked in by 1940.

Since the Belgians had elected to resist, the forts at Liege and Namur had to be dealt with. They were considered to be very formidable but those who thought so reckoned without the special weapons that the Germans were preparing. These were the 305 and 420 mm howitzers by Skoda and Krupp's respectively. No such guns had ever been seen. The 420 was two inches larger than the heaviest naval gun, 13 1/2 inches. It was thought impossible to make such monstrous weapons mobile. Before they arrived, frontal attempts were made by the Germans, but the Belgians inflicted such frightful losses upon them that at the risk of upsetting the timetable, they waited. The forts at Namur were reduced the same way and after a brave fight, the Belgian Army withdrew to Antwerp out of the way of the advancing German army.

The German plan had started well enough in spite of the grossly underestimated will of the Belgian people to resist and the onslaught against France herself could begin.

You will remember that the French belief was that a strong right wing meant a weak middle. This was not so because the Germans, as opposed to the general military thinking, put more faith in reservists as front line fighters, and thickened the line generously with them. The French High Command despised reservists and at first would not use them at all. Consequently, the Germans were stronger at every point than enemy calculations allowed for. The reservists proved themselves able and dependable troops and immediately gave the Germans a large numerical superiority.

The English, after much argument in the Cabinet and High Command which seemed largely to be concerned with how little they could do instead of how much, agreed to send four divisions of troops but stipulated that they would in no way be under the command of the French - indeed, must enjoy complete independence. This did not appeal to Joffre but there was nothing he could do.

The English were sent over under the command of a rather opinionated and arrogant but quite insecure character, General Sir John French. This gentleman was very jealous regarding the independence of his command and so afraid that he might lose it in battle with the Germans that he was about as much of a liability as an asset. At his whim, he could retreat leaving the left wing of the French 5th Army uncovered and without giving ample notice to Joffre. This was disturbing to say the least and he became extremely unpopular with all but especially with Joffre and Lanrezac, the Commander of the French 5th Army whose flank was continuously in danger of exposure. There is not time to go into the tedious runnings back and forth of couriers and the entreaties made to General French but it was certainly not in the interests of fighting the Germans that Sir John seemed to bend most of his efforts. Such fights as he did get into in these early days were accidental but in which the British soldier acquitted himself nobly.

Before really general hostilities began, the French, in a sentimental gesture entered Alsace, and with bayonet charge and many pennants and plumes flying, captured a few villages. They stayed only long enough to revive the adulation due deliverers and to post placards with the news that "the day" had come and other stimulating advice before they were driven out again leaving the Alsatians of French leaning to suffer at the hands of the Germans for their enthusiasm for the enemy.

Joffre was an almost unbelievably stiff, unreceptive, and imperturbable man. Even at the lowest ebb of French fortunes his demeanor and habits did not change. He slept well, retiring invariably at 10 pm and he ate three square meals a day come what might. He was totally unreceptive to any suggestion that the German right was a genuine threat. There were a number of high French officers who were deeply concerned about this and made their fear known. He brushed all this aside as of no importance. Indeed, Joffre had been preceded in office by a General Michel who spoke too often and too feelingly about this threat and was relieved of his command for his pains.

After much correspondence with Joffre, Lanrezac was allowed to shift his army slightly westward to prevent being outflanked, but must face eastward so as to do his share in the offensive through the Ardennes according to plan 17. The shift allowed him was totally inadequate. Permission was given more to shut the man up than anything else. This constant argument between Lanrezac and Joffre finally cost Lanrezac his job because he was right, and his independent action at critical points saved the French Left Wing and probably the campaign. In addition to Joffre, Lanrezac had Sir John French to contend with - truly he was the most unfortunate of men.

More disquieting reports of German progress on the Right began coming in and Joffre, while still holding to the strategy of Plan 17, could no longer ignore the threat, and ordered Lanrezac to move further West and face the oncoming danger. This spread the line much thinner than was ever anticipated - it also left the French 4th Army under de Langleloi to be the spearhead of the assault through the Ardennes and a considerably weaker spearhead than called for in the original plan. Lanrezac had still not heard from the English as to whether or not they intended to line up on his Left which was completely in the air.

Von Moltke had his troubles too. Since the French were not massing on the left of their line and since there had been activity on their right, it could be that they were preparing an attack on that flank. This might dislocate the entire German plan of procedure. Von Moltke's dedication to the Schlieffen plan began to slip and was never quite so strong as before. Visions of a double envelopment of the French, a true Cannae which is the dream of all soldiers formed in his mind. Some shifting of forces had started when it was decided that the French Right Wing was not in fact being strongly reinforced and the vision of Cannae was put aside

Warnings about the German right continued to pour in and Joffre told Lanrezac that he was to face them along with the English and Belgians at the Sambre River, but in case the Germans seemed not to be in force he was to recross the river and join the offensive through the Ardennes. Lanrezac had no intention of following the second order as he quite certainly knew where the danger lay but he realized what a puny force his 5th Army would be. However the British had come up and Joffre had sent three divisions of Territorials around them to extend the line further to the left without thinning it more.

From August 20th to 24th, the whole front exploded into battle. Fighting was in progress in Lorraine before the other sectors joined in but by the 21st, the engagement was total.

The French 1st and 2nd Armies attacked according to the French philosophy without heavy artillery support and against prepared works and an enemy who laid great stress on artillery and machine guns. They were repulsed. The Germans counter-attacked and captured the town of Nomeny. Acknowledging a great defeat, the 2nd Army broke off the battle and dug in. The 1st army whose flank was exposed by the retreat of the 2nd was forced to do the same. While severe fighting continued, the situation at the Eastern end of the line remained relatively stable during the time covered in this account - a very important factor in the later and final battle.

The order for the general offensive in the Ardennes was given by Joffre on August 21st. The 3rd and 4th Armies were to act in concert through these deep woods so poorly suited to the offense or indeed from any kind of action except by tanks as in the breakthrough in World War II. Added to the difficulties of the terrain was a dense fog which was present on the morning of the attack. To make matters worse, Joffre had removed about 50,000 soldiers from the 3rd army to back up the 2nd Army further east. Joffre was convinced that he had numerical superiority in the Ardennes and felt that if victory were not well advanced, the fault would lie with the troops and their commanders who failed to take advantage of that superiority.

The truth was that numerical superiority lay with the Germans and this, together with their crushing use of artillery and machine guns, made it impossible for the French to make any impression on them. They could not hold their ground much less gain any. They retreated.

On the left, the 5th Army and the British never did make contact with each other and fought separate battles, Charleroi and Mons. This was due to poor liaison, mutual antipathy between Lanrezac and French, and the fact that the British started too late to make contact. These two groups had facing them three German armies, supposedly the cream for they had been picked to form the all-important right wing.

Lanrezac informed Joffre that if he attacked according to orders, he would be outflanked on his left and the way to Paris would be open to the Germans. Joffre replied that he would leave it to Lanrezac as to when to start his offensive - no word about holding or retreating. The enemy, however, took the decision out of the 5th Army's hands. The Germans crossed the Sambre at two points between Nansen and Charleroi and the French were driven back.

Meanwhile, the English were marching northward towards Mons with their leader, French, secure in the belief that no contact or at least no serious fighting would occur before August 24th. Suddenly, and for the first time it became apparent to some that the Germans were following the Schlieffen Plan of the wide sweep. The loudest talker among the British was General Henry Wilson and his influence on Sir John French was immense. He believed implicitly in Joffre's idea of the disposition and weakness of the Germans in the west and he discounted the evidence to the contrary as overwhelming as it was.

On the 22nd, the British cavalry made contact with the German force and defeated them in a very small engagement. This meeting confused the Germans for although they knew of the British landing they expected them to be with the Belgians not the French.

The Germans also had their share of dissention between army commanders. Von Kluck of the 1st Army and Von Bulow of the 2nd were constantly at odds with each other. Kluck wanted always to extend to the West to flank the French and English according to the major plan while Bulow complained always that his Right Flank was being exposed by such dispersion. Since Kluck had been put temporarily under the command of Bulow he was under orders to obey him. He protested to Von Moltke but his plea was rejected. He thus advanced on Mons and contact with the British. His attack was frontal and he was handled very roughly. The German numerical superiority and the retreat of the French 5th Army which exposed the British flank forced them to retreat.

It was clear to all that the French were in retreat along the entire line and into their minds crept the idea of another Sedan. Lanrezac was in a particularly sensitive spot. His right flank was uncovered by retreat of the 4th Army and Von Housen's 3rd Army was in good position to turn him. It this happened and his army were destroyed, the chances were overwhelming that the rest of the army would be rolled up and another Sedan would indeed be accomplished.

He knew that Joffre would disapprove his orders for general retreat so he did not consult him. He also knew that he would be considered a doom-crier, a "catastraphard" as the French have it, and would probably be removed from command. Both of these things happened to him, but it is quite probable that he saved the French from another Sedan not only because of the tactical result but also because it had a great deal to do with the change in German strategy. This change was the forsaking of the swinging door to a shorter route which would bring them north of Paris. The general retreat of the French convinced Von Kluck that they were completely beaten and in disorder. He at first was able to almost convince the General Staff that such was the case. Von Moltke was rather doubtful of the degree of disorder in the French retreat or from the often wondered aloud "where are the prisoners, there are not enough prisoners." Kluck took it upon himself to shorten the radius of his swing which caused Schlieffen to roll over rapidly in his grave and also presented the German flank to Gallieni and the Army of Paris. This flank was fallen upon with great gusto and the war of maneuver was over.

When the Germans came closer to Paris in a seemingly irresistible tide, the British disengaged themselves completely from the French. Sir John was convinced that all was over and could think only of saving his army, evidently planning to go southward and be picked up at some French port on the Mediterranean. This may be doing him an injustice but it seems likely that he did not plan to jeopardize the British any farther. They had fought well and effectively but liaison between them and the French had been so poor and had been so strained that a feeling of having been handed the short end of the stick pervaded headquarters. This feeling was not without foundation, for at the time of their meeting with the Germans at Mons, they had faced the bulk of the German 1st Army, 160,000 men and 600 guns, against their 70,000 men and 300 guns. Furthermore, the French 5th Army on their right had retired without warning. This together with further delay in retreating of one corps of the British because their general could not be found to receive the order resulted in one battalion being left behind entirely and almost annihilated. Paris had been left with almost no army at all. When it became evident that it was likely to be over-run, a cry went up for General Gallieni, retired, who had preceded Joffre as Commander in Chief and who seems to have had the confidence of all. They asked him to assume the military Governorship of Paris in place of a General Michel who some years before had been given this post, considered then as of no importance, because he had the good sense to oppose Plan 17 and insist that the German main offensive would be on the West. Nothing could bring your sanity into question more quickly than to oppose Plan 17. Gallieni had gone into retirement with no black mark against him. I do not know what he thought of the Plan but he must have not been heard if he said anything against it.

He agreed to take the post if he would be furnished an Army of three active corps. Messiny, Minister of War, thanked him effusely, shook his hand repeatedly, kissed him, and in general demonstrated that, to quote Gallieni, "the place I was succeeding to was not an enviable one".

Gallieni had been gotten, but to obtain three army corps from Joffre was something else again. He had been assured that the politicians would have no say-so in his conduct of the war and he would certainly not allow it now, regardless of the circumstances. It was now up to Messimi to find the authority to make this demand of Joffre. He searched through the library of decrees until midnight and found one that charged the civil government with the vital interests of the country. The request was sent to Joffre on August 25th and he ignored it.

Gallieni galvanized the people of Paris into action in preparing the defenses. Charges were placed under bridges in case destruction was necessary, a system of deep narrow trenches protected by earth mounds, logs, and barbed-wire, and wide-mouthed holes with sharp spikes at the bottom were prepared.

He was still demanding that Joffre send the three corps which he had stipulated as the only condition under which he would accept the position of military governor of Paris. Joffre was still not disposed to make the transfer, but a 6th Army made up of detachments from the five original had been formed and he planned to cover Paris with it but not defend it directly or to put it under Gallieni's command.

To go into further detail about the countless exchanges between Paris and Joffre is not necessary. To say that getting blood out of a turnip was about as easy as persuading him to part with the three corps suggests the difficulty. Indeed Joffre stated the same or even more reluctance to relinquish other ideas and plans. He did not storm or rage, he simply let the prayers, entreaties, demands, etc. break against his impassiveness. However, it was this same impassiveness, augmented by a few cheery words to his staff on rare occasions, which bolstered their spirits when no one else could see anything to be cheery about. As my source points out, it mattered not whether it was deep wisdom (which I do not think was attracted to him) or a failure of imagination. Its effect was salutary and Foch himself, who was to take over from Joffre later in the war, said, "If we had not had him, I do not know what would have become of us." Gallieni would not hear of any threat of his removal which was suggested by the Council of Defense in Paris. The suggestion had been made because of Joffre's opinion that Paris should not be defended but declared an open city. He was the man that seemed to fill the bill at least when the French fortunes were at their lowest.

Joffre not only had the Germans to contend with but also the British who had completely disengaged from both their allies. Sir John French refused to move and since his command was an independent one, Joffre could do nothing but request. Kitchener himself came to France and issued orders to French, but he left a loophole in his zeal to be polite. His orders ended "Of course you will judge as regards their position in this respect". That is the position of the English with respect to the French. It was at this time that Kluck made his fateful decision to depart from the Schlieffen plan. He knew that this would expose his flank to the garrison of Paris but so sure was he of the demoralization of the French that he did not consider the fact of importance. He drove his army to the limit of its endurance to round up the beaten French. Von Moltke, in spite of some misgivings, agreed to Kluck's inward wheel and pursuit, but ordered him to form in echelon behind the 2nd Army to offer some protection to the flank. Kluck was insulted and ignored the order, pushing ahead of the 2nd Army.

Kluck's definitive turn to cross Paris to the North and East was seen by a Captain Tepic of Sardet's Cavalry on August 31st. The same cavalry and infantry columns complete with batteries and ammunition wagons taking the road east toward Compiegne rather than south as was expected. This did not mean a great deal in itself, but as more information came in and the pins on the map were moved accordingly, the more became apparent.

Meanwhile, the 6th Army at long last was put under the command of Gallieni. Also the 45th Algerian Division reached Paris by then from the South and was added to the defensive forces. All the government had left Paris leaving Gallieni together with the Prefects of the Seine and of Police in charge of the city.

On September 3rd at Gallieni's headquarters in Paris, information brought in by aviators of the Paris Garrison confirmed the movement of the enemy from West to East and the officers present in the staff room cried out together, "They offer us their flank".

Gallieni immediately set about persuading Joffre to coincide attack by his army with the movement of the Paris garrison against the German flank. It was also necessary to persuade the British to support the 6th Army.

Joffre, after many telephone calls from Paris, long meditation under a tree to escape the sun and to be alone, and a final showdown talk by Gallieni, signed General Order #6 committing his army to the offensive against the front and flank of the enemy.

The British held out longer against participation in the plan than did Joffre who was moved to visit Sir John French himself after finding that the British had already continued their retreat. When he found him, Joffre's usual reticence left him and he poured forth an impassioned flood of speech. It must have been potent for it is said that French through his tears asked someone else to reply, "Damn it, I can't explain. Tell him we will do all we possibly can".

Joffre, when he returned to headquarters said to the assembled officers, "Gentlemen, we will fight on the Marne".

The battle of the Marne ended in a German retreat. The last four days of their schedule which was to utterly defeat the French were spent in retreat and was the destruction of their dream.

The attack of the 6th Army on Kluck's flank and his turn to meet it opened a gap between the 1st and 2nd Armies. After near defeat, troops of the 6th Army were reinforced by the IV Corps in Paris of whom 6000 were rushed to the front in taxis by Gallieni, the famous taxicab army of that battle, and he held his ground. Foch, in front of Von Hansen's 2nd Army was giving ground when in his grand French he gave his order, "Attack whatever happens! The Germans are at the extreme limit of their efforts - Victory will come to the side that outlasts the other".

The world had given the French up for lost. None, much less the Germans had any idea that they could mount an offensive with even a fraction of that power, indeed doubted that they could mount one at all. Von Moltke wrote sorrowfully, "French élan, just when it is on the point of being extinguished, flames up brightly". Von Kluck said, "The reason that transcends all others is the extraordinary and peculiar aptitude of the French soldier to recover quickly. It was a possibility not studied in our War Academy."

Also true, however, is the fact that the Germans had placed themselves in a most precarious position tactically. They were exhausted not only from continued marching, but from hunger as they had far out-run their supply line. Also, if over confidence ever contributed to failure this was the prime example. Poor communications and personal pride also contributed. Not the least of the factors was the great sacrifice the Russians made by their invasion of East Prussia which resulted in their grievous defeats at Tannenburg and the Mansurian Lakes but which drew the army corps away from the Western Front and kept them from taking part on the Marne.

The victory even so was not as complete as it might have been. The British were slow in entering the gap between the 1st and 2nd Armies and the Germans retreated in relatively good condition. They were not overrun as were the Federals at Chancellorsville or enveloped as were the French at Sedan 40 years before, almost to the day.

They established the line along the Aisne and the stalemate began, but France and Paris were saved and a second Sedan arrested. That was enough to be thankful for in 1914.

**Psychopaths**

Medical progress and particularly the surgical part of medicine has always gotten a great boost from wars. I can speak personally for Orthopedics having been active in both pre and post-World War II practice. This field was far from crowded and also rather far from its present efficiency in the treatment of injuries. Following the war, journals blossomed and the practicing physician was overwhelmed by an avalanche of medical literature on every conceivable subject not excepting Obstetrics and Gynecology.

If these times were heydays for writers on typical medical and surgical subjects, they were even more heady times for the psychiatrists. Those in the military were treated in the short space of four or five years to a wider range of mental disorders, within the age groups involved, and more of them, I daresay most of them, would have seen in a lifetime of private practice. For those who entered the VA Service post-war, this deluge continued.

One of the types that came under the scrutiny of the head-shrinkers, and I gather in most unwelcome numbers, were those of the groups variously known as constitutional psychopathic state, constitutional psychopathic inferiority, psychopathic personality, no good sons-of-bitches, or just psychopaths.

Apparently most of these terms included several different entities but from this group of problem cases, there emerged or seemed to emerge as fantastic a batch as ever set a psychiatrist's teeth on edge. What makes gibbering idiots of these doctors is the fact that legally the people in question are sane and they cannot be detained in a mental institution. They are frequently admitted but allow this simply because they can thusly avoid the unpleasant consequences of some escapade which has involved them with the police. Once in the institutions, they lie low until the thing has blown over then don, quite readily, the appearance and behavior of unassailable sanity and demand their release. If this is denied, they have no difficulty in obtaining a hearing and quickly prove to the satisfaction of all that they are not only sane but as is more often the case than not, more intelligent than the average person loose on the outside. I said to the satisfaction of all, of all that is except the weary psychiatrist, who has been through all this many times before and who knows before long this very man or another of his ilk will be dragged to the gates howling, bedraggled, drunk, boastful, filthy and obscene, and handed over by a constabulary only too happy to get rid of him.

He will have been found drunk and loudly profane; wallowing in a ditch, creating an uproar in a bawdy house by refusing to pay or by insisting on engaging in the pastime sought on the roof of the house or on the front porch, or may possibly be found relieving himself on a monument in the courthouse square.

These are not people from the slums and river bottoms. They are the sons and daughters of responsible and respected families in the community. They are not primarily alcoholics, sex fiends, degenerates in the usual sense of the term, or addicts, yet the depths to which they at times go cannot be outdone by any of these and the absence of any sense of shame or remorse shown by them cannot be remotely approached by the lowest of these. On the contrary, the most profligate and unspeakable acts they commit are appreciated by them as the merest peccadillos at worst and at best as cracking good jokes.

This business of the psychopath has been argued about a great deal by psychs but it seems to the layman that mostly they are lumped with other groups and disposed of that way rather than tediously inspected in an effort to see why they are what they are.

Harvey Cleckley of the Medical College of Georgia is one who has felt that they represent a group of themselves apart from other cripples with whom they are often classed. He achieved prominence, if not the whole-hearted acclaim of his colleagues, by writing in 1950, or thereabouts, a book entitled, "The Mask of Sanity". This title is in itself a master stroke. I doubt that there has ever been a title as completely appropriate to its subject as this one.

In talking with other psychs, I get the impression that Cleckley is considered to have departed from orthodoxy, not only in writing a popular book in which he questions the conclusions of his colleagues, but also in making money on it. His later works in collaboration with Corbitt Thigpen, "Three Faces of Eve," quite probably only confirmed them in this opinion. I can only say that to a certain depth, that is as deeply as the average not-psychiatrist can go, this book describes a type which is at least faintly familiar to most of us and which differs from any other type of which we, or at least I, have any knowledge.

The chief distinguishing feature of this ailment is the complete lack of conscience shown by those possessed by it and their absolute unreliability. I do not mean occasional over-riding of conscience or periodic unreliability, however egregious. This can be seen in a very great many of us. What is meant is utter and infinite failure in the moral realm such as would strike awe in the devil himself.

Yet these people when it is their whim and when there is something to gain by it, something to hide or something physically unpleasant to avoid, show a front which is so disarming and so seemingly forthright and charming that even the least gullible of men can only feel that here is the very model of honor and high intellect. This latter they most often have, the former never. They can give the most convincing lip service to contrition and to promises for the future without knowing in even the least degree what contrition or reasonable behavior means. They manage to convey that they have been victims of the most unrelenting provocation or by suggestion that they are manfully taking the blame for someone else. That they are able to do this is a tribute to their art much more than to the stupidity of the person being conned. The very best have been taken in by these. Cleckley says that he found that his office force could spot as a psychopath one who came to his office and went away with a check instead of leaving one for Cleckley. Over the years, he says, this has happened several times.

In working out some way of handling these people which Cleckley feels is long past due, the chief obstacle is that there seems to be no general recognition that they exist. The family doctor, usually the family lawyer, and the minister are called upon for help from time to time but they do what they can and keep their mouths shut. The psychopath's acquaintances (they never have real friends) look on him as a hell of a fellow, a card, and so forth but are rarely close enough to know what he does. The psychopath likes to travel and usually when he reaches the age when such carryings on can no longer be considered wild oat sowing, his escapades take place in more or less remote regions and such stories as filter back home are given the usual allowance for exaggeration. These inane, aimless follies differ from those of the usual alcoholic, addict, etc.

These people accounted for about one-eighth of the admissions in one Federal Hospital during the period of twenty-nine months served there by one psychiatrist who recorded it - 102 out of 857 admissions. He felt strongly that 134 others classified as alcoholics or drug addicts were only that secondarily and were primarily psychopaths who had been hooked in their aimless dallying with these drugs.

These came to the hospital with not the remotest idea that they needed treatment but only as a lesser evil than being prosecuted for forgery or theft or than having their remittances from home cut off. These are, in fact, quite probably the remittance men about which much has been written. They have become so unbearable in their behavior that they are given a regular allowance to go to some far place and never return. This name was first given them, I believe, by the British. I believe it can be said also that the sun never sets on a remittance man more appropriately now than it can be said about the flag. In this part of our country it used to be the practice to put a one-way ticket to California and stuff them or pour them, as the case might be, on a train. I have not heard of this old custom for many years but in the early part of this century, it was a favored way to abate a nuisance. California was a good deal farther away then than it is now which may account for the decline in favor of this protective measure. The skipper was usually in some kind of a jam, more unsavory than usual and was given the choice of suffering the consequences or going to this far place never to return. I do not know how much this accounts for the rather fey characteristics of Los Angeles and the record amount of whiskey consumed in San Francisco.

Already I have allowed myself to slip into facetiousness about this problem which has not been appropriate to the gravity of the matter. It is, however, how most people react when hearing about the exploits of some vague acquaintance who was known to be of no account and given to ingenious acts of abandon. It is the families of these persons who grieve and who must be protected. At present there is nothing that the law offers and consequently nothing that can be offered by the psychiatrist. A frank schizophrenic can be put away and kept there, our present subjects cannot. We continue to be amused by them unless they tread heavily on our own toes. We can put them in jail but so outrageous has their behavior been that it seems obvious to the authorities that they are lunatics. From there it is but a step to the Veterans Hospital and thence only a step to freedom. They repeat this cycle endlessly, blithely, and without remorse or shame. The merest wisp of a whim projects them into acts of the most flamboyant idiocy, the consequences of which are not deterrent, if indeed this crosses their mind at all. Some of these people go into what may be called a state of remission in which they take on the mask of sanity. These periods may last for a month or a year during which time they may work with exemplary diligence and competence. Somebody seems always able to get them a job and because of their superior intelligence and imposing facade, they do it well but the break inevitably comes and when it does they bring all of this down about them with the most reverberating of crashes and the dance is on again. Oddly they pick the very time, place, and manner best calculated to get them thrown out on their ears in the least possible time with the maximum of odor.

There are those, however, who in spite of irregular attendance, sprees, brushes with police and so forth, finally finish college and manage graduate studies with success. All this under the astounding handicaps that these people furnish for themselves. What combination of fortuitous circumstances in addition to superior intelligence enables them to live in a manner which would spell ruination for most and yet get by, I do not know. It does not, however, change them as subsequent events always show. Instances are given by Cleckley which illustrate this and also illustrate the almost unbelievable tolerance extended to them by the people with whom they come in contact.

In spite of the short shrift given this particular personality defect in psychiatric textbooks, there have been many efforts to learn the cause of their behavior by scattered ones in the specialty who seem to feel with Cleckley that the condition is unique. Others before them were struck by the disparity between their behavior and their apparent lack of any demonstrable psychic lesion.

Pinel, over a hundred years ago, noted this and wrote of it. Prichard and Rush wrote of moral insanity and derangement of the will. Maughs considered this type and spoke of disease which spares the intellect but attacks other faculties such as moral affections, will, and sense of duty. These early observers considered this behavior an illness and not ordinary crime or depravity. However, in 1873 the Professor of Medical Jurisprudence at Columbia said, "The only disease to which moral nature is subject is sin." This seems to remain the attitude toward the problem today. In other words, these are sane and should be held accountable for their acts. Sane, that is, in the psychiatric sense. No matter how bizarre and senseless the behavior, if the miscreant can talk sensibly about it, admit his fault, promise to behave in the future, and give logical reasons why his behavior was wrong, then he is sane. Some of the essential criteria for diagnosing insanity are not fulfilled.

The so-called faculty psychology is no longer considered valid. This is separating the psyche into various faculties such as intellect, wisdom, moral faculty, and so forth. Regardless of this, says Cleckley, it is not a little surprising how concepts rooted in this long discarded psychology enter through the back door and influence the attitude and practices of today.

Cleckley lists the points characteristic of a psychopath as follows:

1. Superficial charm and good intelligence.

2. Absence of delusions and other signs of irrational thinking.

3. Absence of nervousness or psychoneurotic manifestations.

4. Unreliability.

5. Untruthfulness and insincerity.

6. Lack of remorse or shame.

7. Poor judgment and failure to learn by experience.

8. Inadequately motivated antisocial behavior.

9. Pathologic egocentricity and incapacity for love.

10. General poverty in major affective reactions.

11. Specific loss of insight.

12. Unresponsiveness in general interpersonal relationships.

13. Fantastic and unwitting behavior with drink and sometimes without.

14. Suicide rarely carried out.

15. Sex life impersonal, trivial, and poorly integrated.

16. Failure to follow any life plan.

Needing a term for this disorder, Cleckley carefully winnows out those which might be misinterpreted as referring to some other ailment or which do not satisfy his criteria for a true representation of the defect in the psychic whole. This is rather painstaking, wordy, and doubtless scholarly but rather too obscure for the average non-psychiatrist.

He chooses semantic disorder or semantic psychosis, seeming to prefer the latter. There is a condition known as semantic aphasia, in which the patient retains the power of verbal production of words and sentences but loses his ability to understand the meaning and significance of language. This is somewhat analogous to the condition be discussed here.

The poverty in affective reactions is best discussed by Cleckley.

I do not think that I was more favored than most in coming in contact with these people because I believe that all of you had had at least a nodding acquaintance with one or two. By and large, they were probably people with whom you were not associated very much and who were considered a good deal racier than the group that you found more to your taste.

I know of two remittance men who were shoved out of town about the time I was born. Both were sent to California. Both continued their rollicking way but one married a strong-willed, ambitious lady who seemed to fit him well and who, with probably some help from him, carried them to considerable affluence. I don't know the finish of this one, but fifteen to twenty years ago, he had stopped drinking and so far as I know, may still be leading an exemplary life. I cannot be sure that he was a typical psychopath. Under some circumstances, a very few do make a reasonable adjustment. If this man, for the first thirty-five to forty years of his life wasn't a psychopath, he would do until one came along.

The other, who by the way, was divorced by a wealthy woman just before he was given the one-way ticket, was in and out of institutions for the rest of his life. He still wrote checks that were made good by his mother until her money ran out and he was forever embarking on schemes that would make him rich overnight. One, I remember, was a non-pneumatic auto tire which would revolutionize the industry. He is dead. I don't know whether he died in bed or at home, if he had one, or in an institution. He was gay, not from gallantry in the face of misfortune, but because he never understood.

I remember a family of four boys, the youngest of whom was my age. All, it seems to me, were of this type. The oldest died in Milledgeville [an insane asylum]. I do not know what became of the next. Both were considerably older than I. The third contracted tuberculosis and finally came home. Somebody set him up in a small poultry business here and he ran this for the last three to four years of his life, the only thing he ever stuck to. On at least two occasions, I went with his wife of the moment and younger brother to drag him drunk out of bawdy houses on Oak Street. He once broke up a crap game going on in the front room of his house by suddenly appearing with a pistol and shooting the pictures off the walls. This I well remember was on Christmas Day and he was feeling unusually festive. He never made a dime and was supported, after he ran through the money left him, by various women, one of whom it was reliably reported ran a fancy whorehouse in Miami.

The younger brother left town by the time he was 25 but would drop back from time to time looking dingier each time. He too, so far as I know, never made a dime. I lost track of him and he is probably dead. I will say that I don't remember his ever mooching money off of me, quite possibly because I didn't have any.

When I entered medical school, there was a most impressive man who entered the freshman class with me. He was rather slight of build and had a blonde moustache, but his behavior at that time and his manner of speech indicated great strength of character and intelligence. He made such an impression that we all were anxious to room with him, feeling sure that this would practically guarantee our getting by. He was elected president of the class and represented us in student council. It became apparent after a few weeks that all was not gold. He did poorly in class but always had a ready excuse and a plausible one. His migraine, for instance had been unusually bad. It was found that he kept a jug in his closet (he roomed by himself) and what migraine he was having was not the usual kind. He said gravely that whiskey was the only thing he could rely on to stop an attack. On the night before term exams three months later, he came to the fraternity house roaring drunk and completely wrecked our efforts to study. After about an hour he passed out and there was quiet except for his snoring.

Needless to say, he made what was said to be the lowest mark that had ever been made on any exam at any time at the Medical College of Georgia. He was asked to leave at this time.

His father was a successful and, I think, politically influential doctor in a North Georgia town and he wrangled him back into school the next year. He flunked again. Again, he got back in. This time he finished himself. One of our professors was an Austrian Jew who had not been in this country long and was a little skittish about being among outer barbarians anyway. Our friend conceived the idea of writing him a letter from the Ku Klux Klan demanding, under the pain of death, that he pass (giving his own name of course) so and so. The letter was patently and transparently a fraud and so and so was hauled before the dean and threatened expulsion. He promised to apologize but instead of doing so he proceeded to pitch a drunk, obtained a knife and chased poor old Doctor Salant over and under and around the tables in his laboratory. He was taken into custody and stayed in jail until his father came and carried him home. The school saw no more of him and I have heard nothing since.

This man was somewhat over-age when he first came to medical school but even allowing two or three years per class, how he ever got through his pre-med at the University of Georgia is beyond me. Not that he was stupid but with his behavior, it would take near genius to legitimately get out of high school.

Another schoolmate was a divinity student at Mercer. He was a mighty gospel singer and a passable player of the piano. He could move the heads of Mt. Rushmore to tears with his "Beulah Land" and could likely make them join in on the choruses. He was a special favorite of Doctor Rufus Weaver's because nothing could assure the success of a revival like his song-leading and exhortations.

It was obvious to all that he was fond of the bottle. This was brought forcefully to the attention of the student body when he was arrested one night, having driven his car diagonally across Tatnall Square until he reached the fountains. Finding his way blocked, he proceeded to blast the welkin with his horn and his loud demands for somebody to come and move the fountain. He was taken away by the police. This story was vouched for by good authority and was known all over school the next day. We never knew who bailed him out of these predicaments, but it was generally understood to be Doctor Weaver. If I do this good man an injustice, I apologize.

Another distressing habit of my schoolmate was laying out of classes for two and three days at a time, whether drunk or not, I do not know, but I guessed. Some said he was playing piano in a house on the lower end of Hemlock Street. This may be entirely without foundation. At any rate when he would finally come back, Doctor Weaver would call him in, gently remonstrate with him and ask him why. His reply was, reportedly, that he laid out to let the rest of the class catch up with him. This may have contained some truth for he was considered to be well above average in intelligence.

He must have finished, or at least I suppose so, because the next I heard of him, he was pastor of a Baptist church near Atlanta. I heard this from some who saw him at a football game drunk in the lobby of an Atlanta hotel and loudly proclaiming that he was the preacher of the best blank, blank Baptist church in the world. This sounds unbelievable. Though it is hearsay, I talked to several who swore they saw it. I do not think it is beyond the realm of possibility at all. A short time later, I heard he was unfrocked.

I saw him one last time several years later when he came to my office in a very shiny and dingy blue serge and the most startlingly large boutonniere of dead crepe myrtle I had ever seen or ever did see. We chatted about old times for a few minutes. He then borrowed fifty cents and left. He did not seem at all cast down about his obviously hard lot. He seemed the same amusing and poised man he always appeared when he was sober.

There were others, but these I remember best. I do not know how devastating an effect they had on their parents for some I did not know and some I was not close enough to observe. They afforded wonderment and amusement to us but they must have literally destroyed those close to them. The death of a child must not afford one-tenth the grief and I am quite sure any of these parents would have gladly died themselves had they the remotest idea that their child would be changed. I feel that one thing that kept them from dying of grief was their knowledge that their child would forever need help and that they must give it. On the other side of the picture, I have known several parents who had this cross to bear but it was only after varying lengths of time that I knew of their problem. They were mostly patients of mine and invariably they had the appearance of people carrying a burden too heavy for them. They struck one as being a little bemused, somewhat withdrawn and vague, rather dejected, and somewhat apologetic for being a bother. I remember one mother who had divorced the father of the wayward son and had married again. She bore up rather well and I got the impression that she had convinced herself that her ex-husband was the cause of it all and had gained some comfort from this. She was only an acquaintance and not a patient of mine. He second husband had taken on the burden and had supplied money and job after job for the boy without making any real complaint that I ever heard. He finally took in this boy's wife and infant after they had been deserted and so far as I know, still supports them. I do remember the pathetic joy of these two when the boy would come back after long absences full of good resolutions and the grief they experienced when he would again, as always, leave without notice and just ahead of retribution for some escapade.

In the years since Cleckley wrote his book, there has been no change so far as I know in the legal or psychiatric status of the psychopath. I am quite sure he did not expect any sudden and dramatic change in the management of them but since this amounted to no management at all, it seems reasonable that some change might have occurred. I do not believe that even the first step has been taken, that is recognition that they constitute a menace that should be taken notice of. The chief destructive force strikes at the family but those who forms an attachment for them, and there seem to be many (especially or perhaps exclusively, women), are literally in hell until they finally divest themselves of them. The rest of us are not entirely untouched for they constitute an expense, well-hidden but very real, and completely wasted. If they could be detained in institutions, the cost might be more, but at least the money will have been well spent. The possibility that some effective treatment might be developed is not beyond hope, but the present handling, or mishandling, of these people is beyond hope.

**Sebring Race**

Not having used this particular subject as a vehicle for boring you for the past five years, I feel it perhaps time to call it out again. My aim, however, is not primarily to bore you, though that will probably be the result, it is to record briefly the rise of the Florida International Grand Prix of Endurance, as the Sebring Race is known, from a very small beginning to its present place as the premier sports car event in this country and the only one in which points may be earned toward the World's Sports Car Championship. Indianapolis is also an international race, but the points won here count toward the World Championship in Formula I racing. One does not hear of this because European drivers are seldom entered in it and as all of the other such races are held abroad, an American, even though he may win Indianapolis, does not thereby earn enough points to make it of importance regards that championship.

A word of explanation here may be in order regarding the difference between sports car and so-called Formula racing. In the latter, the cars used are single-seater all-out racing vehicles and are in three categories, Formulas One, Two, and Three. Formula One comprises the cars of largest displacement which at present is limited to 2.5 liters unblown; Formula 2 is .5 liters unblown. There is no pretense here that the cars can be used for any purpose other than racing. At anything under 70 to 80 miles an hour the engine is very rough and lurches and jumps like a bronco. If you tried to drive it in ordinary traffic you would wind up draped around a post or riding someone's hood. These formula classes do not race against one another except in the rare, bastard race known as Formula Libre which is frowned on by the orthodox.

On the other hand a sports car is supposed to be, in its true form, a car which can be driven in traffic and also raced. To the distress of the purist, this definition has been stretched quite far, and some I have seen would be quite difficult to manage where any sort of speed limit was in force. These are the so-called modified cars as opposed to the production models. They race together but in different classes.

A sports car race may have represented in it cars of displacements varying from 350cc up to 5 1/2 liters or more. These cars are divided into classes according to displacement and are further divided into the Production and Modified classes as mentioned above. There may also be a class known as Gran Turismo, which is roughly comparable to our sportier touring cars but are far better fitted for road racing than ours. The Gran Turismo then would be classed according to displacement.

Both the Formula and Sports Cars are road racers and are equipped with powerful brakes and transmissions, and are sprung for road-holding. This is in contrast to the Indianapolis racer which has no gears, poor brakes, and can turn well only to the left. The tire tread is cut for the circular track and the springs are very heavy on the right side, and on the left are arranged to prevent too much lean to the right. They cannot compete in a road race with any hope of winning and with little hope of going far without a catastrophe.

The Sebring race is one such as was mentioned above wherein all classes run at the same time. It is actually several races being run simultaneously but in which the chief aim is to exceed the official expectation for your car or Index of Performance by as much as possible because the most important prize is given to the car which has the highest Index. The performance expected of a car of a certain displacement is determined by the use of a formula devised in some strange manner by the powers-that-be of F.I.A., the world governing organization of auto racing. Take the Jaguar for instance with a displacement of 3442cc. The formula would read (3442 x 825) divided by (3442 + 250). This works out for the car to 769.1 miles in the 12 hours and the car would have to average 64.09 mph in order to achieve an index of 1.

In this race, as in all endurance contests, the Le Mans type start is used. The cars are lined up in front of the pits facing the course obliquely in the direction of the run, which is clockwise in road racing, and in descending order of engine displacement. The drivers are placed across the track from the cars, and at the starting signal must run across, open and close door, fasten safety belt, turn switch key, step on starter, disengage clutch, and engage low gear. Some are pretty nippy about it and value highly a second or two gained by fast foot and hand work.

From absolutely dead silence there suddenly rises the most tremendous roar and, difficult as it is for the uninterested to understand, this is actually one of the high points of the race. The Sebring event is held at the local air terminal which was built during World War II as a jump-off point for bombers and transport planes bound by the southern route for Africa and Europe. It was deactivated soon after the war's end and lay almost abandoned and crab grass-ridden until one Alec Ulmann, whose vocation is dealing in airplanes, visited there in 1949. His avocation being an intense interest in sports car racing, and knowing the scarcity of race courses for these cars, he was impressed by the possibilities presented. He interested other members of the SCCA, particularly Sam and Miles Collier and George Huntoon of Palm Beach, and together they made arrangements for a race to be held the following winter.

Sam Collier was killed while racing at Watkins Glen that September and for a while the plans lagged, but the date was finally set for December 31st 1950. This was a 6 hour race and was not an international event. Its name then was the Sam Collier Memorial Grand Prix of Endurance and had an entry list of 28 cars. It was a pure handicap race and was won by a Crosley Hot-Shot. Following behind were three Ferraris, one Fiat, three MG-TCs and two Cadillac-Allards to make up the first ten.

Between this and the second race, the SCCA decided to sever relations with the AAA and the second race was held under the sponsorship of the Sebring Firemen, Inc. and sanctioned by AAA. Through AAA, it was listed on the calendar of the FIA and became a truly international affair in which any FIA driver could compete and was upped to twelve hours duration.

This was the first race yours truly attended and it was indeed a revelation to him. It was shortly after that I did talk about it at Ward Dennis' house. I do not remember any wild enthusiasm expensed by the group but for some reason nobody went to sleep that I can remember. In this race, the Index winner was a French Deutsch-Bonnet of 745 cc displacement and the overall winner was a 2 liter Frazier-Nash which travelled 754 miles in the twelve hours. Following came two Jaguars, one Siata, one Ferrari, three MGs and one Morgan in the first ten. Admission fee for this race was one dollar. Admission on practice day was free. The crowd was estimated at 8 to 10 thousand, probably a generous estimate.

The third race, also sanctioned by FIA, was held on March 8th 1953. The winner overall was an American built Cunningham with a Chrysler engine of 5 1/2 liters displacement which did 899.6 miles in the twelve hours. There followed one Aston-Martin, four Jaguars, two Ferraris, and two OSCAs. Again the Deutsch-Bonnet won the Index of Performance. Admission for this race was $1.50, practice free, and the crowd estimated at some 15-18 thousand.

The fourth race saw the arousing of interest in the Italians and they were represented by three Lancias of most prodigious speed, certainly the fastest that had appeared in any Sebring event. Just to make things more certain, so they thought, they brought along as drivers, Fangio, Ascari, Taruffi, Manzon, Valenzano, and taking a short breather from the boudoir, Porfirio Rubirosa.

The cars went like lightning but something went wrong in the oiling system of the two having the fastest drivers, and both engines froze fast after 9-10 hours. This left Rubirosa and Valenzano in the remaining Lancia and running a not too spectacular race. Sterling Moss, probably the best in the world after Fangio and Ascari, won the race in a little 1500 cc OSCA, followed by the 3 liter Lancia of Rubirosa and Valenzano in second place and an Austin-Healy, three more OSCAs, one Kieft, one Siata, one Jag, and one Porsche. Moss' OSCA won the Index of Performance as well as the overall. I believe the price was two dollars this time, and the crowd about twenty thousand or better. This was a truly big-time race and Sebring was really on its way as an event second only to the 24 hours of Le Mans in importance.

Porfirio was the cynosure of all feminine eyes and he did rather well but hardly reached the peak he had attained in other sports.

The fifth race was held on March 13th 1955. Again the roster of drivers was brilliant, but Fangio and Ascari were absent having, I believe, contracts for Formula 1 racing which conflicted in dates with or forbade sports car racing. Almost all the other names were there and the race was not only very closely run but so closely that it was not until two weeks after it was over that anyone knew who the winner was. The final analysis of data showed that Mike Hawthorn and Phil Walters in a D Jaguar had beaten Phil Hill and Carroll Shelby in a Ferrari by something like 15 seconds. They were followed by two Maseratis, another Ferrari, and Austin-Healy, two OSCAs and two Porsches. The tariff was I believe two-fifty or three dollars and the crowd about 25 thousand.

The sixth race on March 24th of last year (1956) again saw Fangio running. Ascari had been killed while practicing in a new model Ferrari a short time before. Fangio and Eugenio Castellotti in a 3 1/2 liter Ferrari won the race. Sterling Moss gave an inspired exhibition of driving in an outclassed Aston-Martin, leading the race for several hours until it simply burned out. The winning car covered 1088.8 miles. Following it were two Ferraris (one finishing tenth being driven by our old friend Rubirosa), 2 Jaguars, one Aston-Martin, one Maserati, two Porsches, and a Corvette driven by two of America's best drivers, John Fitch and Walt Hansgen.

This race saw the entry of two men who had won the Indianapolis 500, Sweikert and Ruttman. The former did quite well, co-driving a D-Jag with Ensley and finishing third only 111 miles behind the winners Fangio and Castellotti. Ruttman seemed a little eager and trampled numerous hay bales. It was not bad for a first effort at road racing but his Ferrari went out after a very few hours with some ailment the nature of which I do not know and he really get a good chance to settle down. This he probably would have done. I have forgotten the cost of this one but it was higher than the year before. The crowd was around thirty-thousand.

The first injury of any consequence was sustained in this race. Carlos Menditeguy, an Argentinian and pupil of Fangio, flipped his Maserati at the esses, a treacherous double curve. He was not wearing a belt according to reports and was thrown out on his head. He was in the hospital for about a month but was back hale and hearty to take part in the 1957 race apparently none the worse for wear either physically or morale-wise. One would think that after an experience of this kind that ardor would at least be dampened slightly but such is not the case especially among the younger drivers. Occasionally an older man will come a prodigious cropper and decide to quit, not often because of loss of nerve but because of a cool realization that his eyes and reflexes are not up to what they were and he sensibly decides to take up a less rapid line of endeavor.

The race just passed was held on March 23rd of this year. Our group had been complaining each year of the rising cost of food and lodging at Sebring and at the increasingly severe restrictions on the spectators. We had even gone so far as to say the race was being ruined by the prices and the multitude of officious temporary policemen who paraded the area and that we probably wouldn't be back next year. This feeling, though not without good reason for being, soon faded each time and when late Fall came we would begin laying our plans just as happily as if we were to be the guests of honor.

In addition to the basic attraction that a sports car race has for me, Sebring adds constant growth in the calibre of cars and drivers from year to year, and one is assured of seeing more and more of the best of both. It is not hard to rise above the annoyances or even grievances incident to the long trip and the lack of finesse on the part of the fast buck contingent at Sebring. Most of the time is spent at the course and we have learned to take most of our food and to cook it on Coleman stoves. We bypass the merchants as much as possible. Next year we hope to carry enough equipment to sleep at the airport thereby giving the complete Bronx cheer to the local Jesse James'. This is just a hope but many did it this year and it is standard procedure in France so it is not impossible. I don't know whether or not my joints will stand it but I'm prepared to try.

We arrived wide-eyed and hopeful but as usual there were unpleasant surprises. Whereas in past years parking was on a first-come-first-served basis, this time the parking places from the start-finish line down past our favorite corner rented for ten dollars apiece and had long since been sold out. We were forced to move on around to the dangerous "S" curve that was mentioned above. We rose at five o'clock on race day to be sure we would have our pick of spots to park but when we arrived the place was already cluttered with cars and people and we barely squeezed ourselves in.

There was a great deal of talk about the Corvette as there had been last year but there was not the undertone of ridicule that had been present. Rumor had it that both Fangio and Moss had asked to try it out and both had broken the course record with it. We didn't take this very seriously at the time but it proved to be true and also that both drivers had been enthusiastic about it. It was learned that the car had been offered to Fangio for the race but he had a contract with Maserati. Whether or not he would have accepted otherwise I don't know but he doubtless was offered a bundle of money which would have been hard to turn down had he been free. Moss also is a Maserati team driver and would have had to turn down any offer from Chevrolet. These contracts generally run a year and it may be possible to see one or both of these drivers for General Motors in l958 in this race at least. John Fitch who is the number one driver on the Corvette team is one of the best in this country but is not quite up to the top quality in the world. He won Sebring back in l953 in a Cunningham.

Not long ago an authoritative European sports writer picked the top thirteen drivers in the world. Of this group ten were driving at Sebring this year. The missing three were Castellotti, Maglioli and Manzon. Castellotti had been killed about a month before. Both Maglioli and Manzon had driven at least once in the race but for reasons unknown to me were not present this time.

The number one spot in this group is Juan Manuel Fangio, a 45 year old Argentine of Italian parentage who got his start driving a Chevrolet in stock car racing in that country. He rapidly graduated to more orthodox road racing and went to Europe where he soon was challenging the best. His greatest rival in racing was Alberto Ascari. They traded the World Championship back and forth until Ascari was killed in practice in l956. Number two is Sterling Moss an Englishman who has been one of the world's best since he was twenty years old. He is now about twenty seven and has won most of the big ones at one time or another. He won Sebring in an OSCA in l954. There is no complete agreement on the order in which the others should be placed but their presence in the group probably would not be questioned by anyone. Peter Collins, also English and twenty six years old, has come into international prominence in the past two years.

Michael Hawthorne also English and in his late twenties is probably the most flamboyant of all and drives very hard. If his car holds together he wins most of the time but unfortunately they are not by any means always held together. He won Sebring in a Jaguar in l955.

Jean Behra, French and 36 years old is considered one of the most reliable of drivers though at one time in his career he must have driven with considerably more dash as he has managed to accumulate some thirty odd wounds and fractures, a good portion of which must have been due to over-enthusiasm. He was co-driver with Fangio this year and it is conceded that he drove quite as well as the Maestro.

Harry O'Reilly Schell, an ex-patriate American living in Paris, is 35 years old. He is a top driver but treats the thing as a sport rather than a business and probably this has lost him some races. Also unless a fellow is pretty grim about it all he doesn't get the best cars.

Luigi Musso is an Italian and thirty one years old. He is the unlucky one. He has won a fair number of races but scarcely as many as his proficiency deserves. Circumstances beyond his control as regards to mechanical troubles have seemed to prevent his realizing his full potentialities. One of these incidents came near killing him at the Nurburgring in l955.

Maurice Trintignant is French and at 39 is one of the old timers. He is one of the most polished of drives and while has won many races he seems to lack the quality which in a boxer would be called the killer instinct. He is probably the best liked of all the drivers. When the racing season is over he repairs to his vineyards in the South of France and oversees the production of a fine brand of Rose wine which I will try at the first opportunity.

Robert Manzon is also French and an old timer being 40 years old. The writer from whom I am cribbing this stuff says, "He is fast and tough and will always carry on a dual until his wheels drop off." and in an aside adds, "Which happens often with Gordini" The Gordini is an extremely fast but not too reliable car, but it is French and Manzon and is loyal so he keeps dropping wheels off.

Piero Taruffi, an Italian is probably the oldest of this group. He must be in his very late forties or early fifties. He like Trintignant is a classic driver and while no longer a top Formula One driver is considered the best in long open road races such as the Mille Miglia and Mexican Road Race both of which he has won - the former one this year.

Mention of the Mille Miglia brings us to the Marquis de Portago who was in this group and was killed in that race last Saturday. He was not a polished driver and had some way to go to reach the very top but he seemed headed that way. He was considered a very bold and dashing driver, some said he was too bold but the accident which took his life (and that of eleven others) could not be ascribed to his driving. No man can handle a car which has a blow-out at l50 miles an hour. I think he will be genuinely missed by all racing enthusiasts even those of us who never actually saw him close-up or heard him speak. He will be missed as would any extremely colorful figure especially when cut short in mid-career. He was one of the last of the genuine 24 carat swashbucklers and you couldn't imagine his dying of prostate trouble, senility or dropsy nor, I think, could he.

The presence in the race this year of an all-out effort by an American motor-car manufacturer to challenge the Ferraris, Maseratis, Jaguars, etc. added considerable interest for everybody. We were very disappointed when the Corvette began to show up more and more infrequently at our corner and finally failed to show up at all. The first pit stops were because of locking brakes then later overheating, and lastly ignition troubles which could not be overcome, cost so much time in the pits that Fitch and Hansgen called it a day and withdrew the car.

In spite of this apparently dismal showing, respect of those in the know was retained for these bugs could be worked out by the engineers given a little time. This Corvette is a far cry from the production model having a tubular frame, 4 speed gear box, alfin type brake drums, inboard rear brakes, dry weight of only l850 pounds and three hundred and ten horsepower. It was said that the body was of magnesium.

One must not forget that while the modified Corvette failed, three production Corvettes were entered and, what is quite an accomplishment for any car, finished the race and in l2th, l5th and l6th place respectively. This is an admirable showing indeed.

There was not a Thunderbird entered in the race and I do not remember seeing one among the spectators. They are fast but as a sports car they are ridiculous and your true enthusiast would rather be caught in a bawdy house than sitting behind the wheel of a T-bird.

As you probably already know the race ended with Fangio and Behra first in the 4.5 Maserati, Moss and Harry Schell second in the 3 liter Maserati, Hawthorne and Buell third in the 3.8 Jaguar and following them came four Ferraris, another Jag and two Porsches.

This race was marred by the death of Bob Goldrich of Chicago driving an Arnolt-Bristol. The accident occurred at the same "S" curve that saw Menditeguy's near fatal spill the previous year. Our car was parked at this curve but about twenty feet from the course and I am thankful that I picked this time to go to the car to rest my leg. I did not witness the crash.

I cannot explain adequately the attraction such a race has for me. Speed certainly has its appeal but speed alone would never win this one and would, if that were the only factor, make the 500 the race to see. I suppose a liking for beautiful and rugged machinery together with an admiration for the artistry of the drivers is actually the basic reason for one’s enthusiasm. I can say that barring accidents etc., that come next Winter the faithful which includes us will begin laying plans and speculating about the probable winner. Then in March we will pack our hamburgers, Coleman stoves, cameras, stop-watches and ourselves into the transportation and set out for the Sebring Air Terminal there to witness what I think is the finest sporting event currently to be seen in this country.

There are many, many thousands who agree with me and these, though fellow spirits, are the S.O.B.'s who place themselves and their automobiles in exactly the spots that you had picked and had beaten your brains out to get to before he did. It is sadly true that no matter how early you arise there's always someone who does it earlier and is sitting smugly and smugly ensconced when you come panting up. I am told that this is true in Life also.

**Nuclear Atom**

Inevitably in reading, one occasionally runs across an article on some branch of Science written for the so-called Intelligent Layman that also strikes the fancy of the brothers, cousins or more distant relatives of this important person. As one is led on by what he reads either through comprehension or lack of it (one urges on as well as the other) he is apt in, I believe, the vast majority of cases to come to the conclusion that he is indeed a very distant cousin of the Intelligent Layman and that either he just doesn't have it or that his attention had wandered rather badly when these matters had been discussed at school. Indeed, it appears at times that the articles are written solely to inspire a deep sense of humility in the reader.

I have had this experience many more times than is comfortable for me to admit but probably the most shattering of all is that most cunningly contrived combination of lure and frustration that is found in dissertations, allegedly for this rather shadowy layman, on the subject of Atoms. The most inviting ones usually begin with a fairly comprehensible statement of what the writer intends to do in the way of lighting dark paths for the reader. You trustingly take his fatherly hand and set out.

Before you can say Albert Einstein, you are in up to your armpits, and not only have you lost your leader's hand but you can't see him either. Something has blown out the light. However, the really diabolical nature of the plan shows itself at this point. Somehow you have been made to believe that the destination is closer than the point of departure so you struggle with might and main until you collapse or throw the magazine away - or both.

What makes one return to this fruitless endeavor is much the same thing that prods a chronic bettor on long-shot horses. Somehow, someday, your nag will have a surge of adrenal juices and become, for that time at least, a super animal. The reward will be great and satisfying. This bundle of hay, shall we say, dangling in front just out of reach has a charm that is difficult to properly describe.

I am not even sure that a pointed foreword such as "If you didn't dig Poontang Fountain don't start this article" would do much to cool the fever but I do think that these fiends should try it. Some lives might be salvaged and some dignity might be preserved.

I have no intention of extending a hand to lead you, except perhaps to get a short beer, for I have no light and I do not know the way but it might be of some interest to review the history of the nuclear atom theory in a superficial way and to ask for clarification here and there from such Intelligent Laymen as may be present. The great majority of progress in this field has taken place in the lifetime of most of us and we have seen the ultimate practical demonstration of effects predicted accurately many years before that day in New Mexico in 1945.

Somewhere around 1800 John Dalton introduced the atomic theory of the elements and suggesting that all known elements might be built of one simple substance. William Pout, an Englishman, speculated that this substance might be Hydrogen. This idea was supported by the fact that atomic weights of the heavier elements seemed to be whole number multiples of the weight of Hydrogen. The development of more accurate means of measuring these weights tended to disprove this idea, and by 1860 it was no longer felt to be tenable.

The idea of the common building block was revived in 1884 by one Gabriel Stokes. In some way, hidden from me, he was led to suppose its existence by a prominent line found in the spectrum of light from nebulae, I presume, because the line did not correspond to any in the spectrum of substances found on earth. He suggested that this line represented matter more primitive than any found hitherto.

Two years later William Crookes proposed the existence of a basic unit of matter which he termed Protyle. Furthermore, he conceived the idea of isotopes of the elements forty years before their existence was actually established. "Probably our atomic weights merely represent a mean value around which the actual atomic weights of the atoms vary within certain narrow limits. I conceive, therefore, that when we say the atomic weight of, for instance, calcium is forty we express the fact that while the majority of calcium atoms have an actual atomic weight forty, there are not a few which are represented by 39 or 41, a less number by 38 or 42 and so on."

This suggestion was more or less ignored until the first concrete evidence of sub-atomic particles was established by the discovery of the electron in the closing years of the 19th century. This stimulated a great deal of experimentation and theorizing in the ensuing years.

Phillip Lenard, Professor of Physics at the University of Heidelberg, suggested that all atoms contained some common component, almost certainly an electrified particle, which was present in each atom in proportion to the mass of the atom, and, also, he demonstrated the emptiness of the atom by showing that only a very small part of this structure stopped fast cathode rays, the major part being transparent to them. This conception is the familiar one today. He postulated that the atoms contained centers of force each composed of an electron and a positive charge in close proximity. He calculated the radius of the dense portion as 3 x 10-12 of a centimeter, or less. This is not far from the present measurement of the radius of the nucleus of an atom.

Many other models of the presumed structure of the atom were made but all violated in some way the laws of physics or at least failed to satisfy certain physical conditions and were, one by one, discarded. Many and ingenious were the theories propounded by the physicists of the world in an effort to reconcile the discrepancies existing in their particular pet model. With all this effort, interest and excitement, the presentation of an acceptable structure for the atom was received, when finally it came, with something worse than coolness. It was virtually ignored. It is felt by many that this was due in large part to the modesty and its byproducts in the man who first observed the phenomenon which enabled him to arrive at a conclusion in accord with the laws. As long as two years later, important books and journals were describing the atom in terms of some of the older proposals regarding its structure.

In May 1911, Ernest Rutherford, Professor of Physics at the University of Manchester, published the paper which presented the nuclear atom to the world. This paper was entitled The Scattering of Alpha and Beta Particles by Matter and the Structure of the Atom. The basis of this paper was his observation of the large deflection of these particles by the matter they bombarded. When a stream of alpha particles was fired at a thin foil of metal, most of the particles passed through, but some were deflected at large angles and a few were bounced directly backward emerging from the same side they had entered. This phenomenon impressed Rutherford far more forcibly than it obviously did other physicists when it was presented to them. They largely ignored it while Rutherford said "It was quite the most incredible event that ever happened to me in my life. It was almost as incredible as if you had fired a 15-inch shell at a piece of tissue paper and it came back and hit you."

The conclusion he came to as a result of this observation was that the atom consisted of a central charge, which he later called the nucleus, surrounded by a sphere of electrification of equal but opposite charge. He then worked out what the scattering pattern should be on the basis of the probabilities of the bombarding particles encountering nuclei in the foil. His calculations agreed with experiments, and he further found that the number of particles turned back was proportional to the atomic weight of the material and to its thickness.

Rutherford, himself, though deeply impressed by this experience, gave no evidence in his writing of foreseeing the immense consequences of his discovery. He continued his pursuit, however, and refined the concept, eventually stating that the nucleus - or central charge as he usually called it - was positive and that it was accompanied by a cloud of negatively charged electrons circling about it. He described the Helium atom as consisting of a nucleus of two positive charges with two remote electrons. He speculated as to why the two positive charges clung together when they should be mutually repulsive, thus raising the question of the binding force holding the nucleus together now. Forty-five years later, the answer is still being sought.

In 1912, Neils Bohr of Copenhagen visited Rutherford's laboratory and became so fascinated with the work going on there that he stayed on for several months. He confirmed Rutherford's findings and calculated that hydrogen had a positive nuclear charge of one unit and helium two units. Van den Brock of Holland theorized that this sequence was followed through the table of elements in order of Atomic Number (not Atomic Weight). Fajans in Germany and Soddy and Russell in England independently formulated the law which holds that, when atoms are transformed by radioactive decay, if an alpha particle is emitted (2 positive charges), it goes down two places in the periodic table; if a beta particle is emitted (one negative charge) it goes up by one place. Soddy also coined the word isotopes to denote varieties of an element having identical chemical properties but different masses. The identity of nuclear charge and atomic number was proven by H.G.J. Moseley, an English physicist, who was killed in 1915 at the age of 27 in battle at Gallipoli. This has been confirmed many times since and it is well recognized that each element, when excited, emits x-rays of a characteristic wave length determined by its atomic number.

These units, protons, neutrons and electrons, have been spoken of as particles. This is to ignore the fact that many physicists do not consider them as particles at all but as waves. All admit, I think, that they have the characteristics of both particles and waves but so far as I can see this doesn't impair their value in experimentation as both schools seem to confirm each other's findings as to the behavior of these things, at least under particular circumstances. Quantum Mechanics and Wave Mechanics seem to reinforce each other, rather than otherwise, so it seems that this fact is the best proof that the things in question are, indeed, both wave and particle.

Bohr seemed to realize more than any other physicist, including Rutherford himself, the importance of the nuclear atom theory and he set about to reconcile such discrepancies as existed here and there with established physical laws and where this was not possible to bend the laws into a reconciliation or to supplant them. He seems to have had little regard for established laws or for gray hairs or for anything or anybody not in accord with him. He was quite probably an SOB and, worst of all, the type of SOB who could prove he was right.

One little thing that would not have disturbed me at all, I am quite sure, but seemed to provoke sleepless nights for those with enough sense to worry about it, was the fact that on the accepted laws of electrodynamics, electrons lost energy by radiation but nevertheless continued to circulate in unchanging orbits in the atom. Mr. Bohr handled that one by simply stating that the classical laws of electrodynamics did not apply within the atom and went on to explain why. His reasoning is all tied up with things that needn't concern us, because I have no idea what they are or mean. Suffice it to say either he was right to begin with or the good Lord shifted things around to accommodate his ideas, for, with minor changes, his description and reasoning is accepted today.

The particle (or wave) most studied by nuclear physicists is the neutron, the reason being that in the study of this item much can be learned about the others. It is used to explore the nucleus of atoms and, from observation, knowledge of both neutrons and nucleus is deduced. The neutron is the uncharged particle of the nucleus. Its mass is somewhat more than the combined mass of a proton and an electron, so dense is this particle that, if a gas of neutron particles were liquefied (this is theoretically possible), a drop of it would weigh more than the Washington Monument. Remembering that the atomic number of an element has to do with the number of electrical charges in the nucleus, it is seen that the neutron can add nothing to the number as it has no charge. Since the number of protons (positive charge), in the nucleus must be balanced by an equal number of electrons of negative charge circulating about and since the chemical properties of an element are dependent on the number and arrangement of electrons, it is seen that the neutron has no chemical action. It has, however, a great deal to do with the atomic weight, and the formation of isotopes of the element with identical chemical behavior but a different atomic weight depends on the addition to the nucleus of one or more neutrons. Thus, normal hydrogen is composed of a nucleus of one proton with one electron orbiting about it; deuterium has a nucleus of one proton and two neutrons with still the lone electron orbiting. Deuterium is plentiful in nature but tritium is very unstable and must be manufactured as is plutonium.

Our same friend, Rutherford, postulated the existence of a neutral particle in the atomic nucleus in 1920. Beginning in 1930, a series of experiments by Bothe and Becker of Heidelberg and later by Joliot and Curie in Paris produced uncharged radiation that had the power of extreme penetration into matter. We have seen why such penetration is possible. Having no charge, the neutron is unaffected by other particles in the atom and the probability of its colliding with one of these is governed by chance and the density of the matter through which it is traveling. Average density of particles in matter is approximately that of the heavenly bodies in the universe so it can be understood how this particle might travel a considerable distance before striking a solid object.

Nowadays there is no lack of neutrons for study for atomic reactors pour out streams of these as a byproduct. Earlier they were much scarcer and were produced by the action of alpha particles from radium on beryllium. These alpha particles are charged positively and most of them never reach a nucleus but interact with the negatively charged electrons about the nucleus. About one out of 5,000 alpha particles finds its way to a nucleus however and knocks out a neutron. In actual numbers this may amount to a million or so per second but even at this rate it would take all of geological time to set free a single gram of neutrons.

Any source of fast particles and/or ultra-short electro-magnetic rays (gamma) directed against a target made of a light element will set free neutrons. The great Plutonium plant at Hanford, Washington can manufacture only about an ounce of neutrons daily but this is sufficient to produce several kilograms of plutonium.

The life of a neutron as an independent particle is short but it may travel an enormous distance during that time. Almost all neutrons are eventually absorbed by nuclei forming an isotope of the element whose nucleus catches it, but a very few undergo decay forming or releasing a proton, an electron and a neutron. This last statement points up a question which the intelligent layman understands as having disturbed physicists for years, namely, Is the neutron really neutral? Who among you were aware of this dilemma and were deeply disturbed by it? I ask for a show of hands. The consensus seems to be that a neutron is sort of compact atom and has a positively charged core surrounded by an equal negative charge. As in the atom then the overall effect is neutrality.

Of course, the question which is known to all of us in some degree is that involving the force holding the nucleus together. It is this force which powers the atomic bomb and although its practical application has been realized, its real nature is not known.

The mass of the nucleus is less than the sum of the masses of the protons and neutrons composing it. It is this lost mass or mass defect of the nucleus which represents the energy holding those particles together. This energy can be computed by the use of the formula E=MC2 where M is the mass defect and C is the speed of light in centimeters. The nuclear forces are far more complicated than any known force. The force between two nuclear particles apparently depends not only on their distance but also on the particle's relative velocity and on the relative orientation of their spins. Also, the force between two particles is independent of their charges, there is equal force between neutron and neutron, proton and proton, etc. This of course is contrary to the expected behavior of charged particles.

To explain this contradictory behavior, it was necessary to invent a new particle. I may say here that these physicists are continually inventing new particles to tie together contradictory behavior and then going on later to prove the existence of such a particle. This particular one was invented by a Japanese, one Hidiki Yokawa in 1935. Today it is known to exist and it is called the Meson. In the nuclear force system, it occupies the same position as does the light quanta in the propagation of electromagnetic force. It jumps in and out of and between the nuclear particles so rapidly that it cannot be observed directly but can be seen in the Wilson Cloud Chamber when it splits into charged particles, electrons (positive and negative) and mu mesons (positive and negative). In the nucleus, the meson never really exists as a particle outside of a proton or a neutron and hence at any particular instant of time. There are several kinds of mesons but the one most important as regards the transfer of nuclear force is the pi meson or the pion which comes positively and negatively charged.

It is felt by the physicists that the nuclear force is explained qualitatively in this way but the quantitative proof remains to be shown. So far, the mathematics involved in this proof is actually beyond the capabilities of today's mathematicians, or as one writer refers to ". . . our mathematical ineptness in dealing with large forces." One thing seems fairly understandable. It has been demonstrated that at ultra-short distances this binding force between nuclear particles is reversed and becomes repulsive. Thus, when more and more neutrons are absorbed in a nucleus, a point is reached where the density of the nucleus is such that these short distances are reached and explosive disruption of the nucleus occurs. Thus, this fantastic energy is turned outward and I suppose could be said to have changed from the potential - or static - to the kinetic state.

In this general connection, the thermonuclear or so-called H-bomb is recalled. It is of interest for many reasons but the most pertinent here is the fact that the mechanism of its release of energy, while nuclear, is entirely different from that of the atom or fission process bomb. This latter process is analogous to an explosion such as that by TNT. because a chain explosion of unstable bodies is produced. The fusion reaction on the other hand is analogous to ordinary combustion in that molecules combine and their chemical reaction releases energy. When two hydrogen atoms combine to form an atom of helium, the mass of the helium atom is less than that of the sum of the masses of the hydrogen atoms which combined to form it and the excess or lost mass is converted to energy after the same formula E=MC2.

If this process could be controlled as can the fission reaction it would be indefinitely more suitable for peacetime use. The difficulty here is that a temperature of some 350 million degrees centigrade is necessary to start a self-sustaining thermonuclear process. In the uncontrolled process, this temperature is attained by the explosion of an ordinary atom bomb which in turn triggers the thermonuclear reaction. One doesn't worry about what happens to the container. For controlled use, a container must be found which will withstand such temperatures and there is no known material which will not vaporize at 10,000 degrees Celsius.

It has been found that a magnetic field will contain the hydrogen plasma or ionized hydrogen atoms, but the process has not been successfully completed even on a small scale in the laboratory.

If you will remember, there appeared a few weeks ago a newspaper story to the effect that it had been accomplished in England. A few days ago, a bulletin from the same laboratory stated that they believed they had erred when that statement was made. The paragraphs below may help you to understand why.

A liter of deuterium gas is confined in a vessel made of some mythical substance which would stand the enormous temperature and pressure. At room temperature and atmospheric pressure, the gas molecules are moving about with a velocity of about 3,000 mph. No fusion takes place.

Now the gas is heated to 5,000 degrees Celsius and the molecules are broken down into atoms. The pressure is 600 pounds psi and the velocity of atoms is about 40,000 mph. Still no fusion.

The gas is now heated to 100,000 degrees Celsius and it breaks down into deuterium nuclei (deuterons) and electrons and has become what is known as a plasma. Pressure is now 22,500 psi and the deuterons are moving at a speed of 170,000 mph. At this temperature there would be one fusion per liter of plasma every 500 years.

At one million degrees the rate of fusion will increase more than a billion times, but the energy released will still be too small to be detected. At 100 million degrees Celsius the reaction rate will become, in the words of Dr. Richard Post, "really respectable." The pressure will have reached 1.5 million atmospheres. The electrons are moving 90,000 miles per second and the deuterons at 1,500 miles per second. Power output is high, but the temperature is still not high enough to make the reaction self-sustaining. Only at about 350 million degrees Celsius will this occur and the output of energy rise above the input.

In laboratory experiments a very low density of deuterium gas is used, a density approaching a perfect vacuum, one ten-thousandths of an atmosphere. Thus rarefied, the plasma, while very hot in terms of the speed of its particles, would have in a liter at this density, a heat content amounting to 18,000 calories - about enough to heat a small cup of coffee.

This reaction furnishes the sun's energy - a rather recent theory which has been confirmed by all observers and accepted as fact.

The foregoing has been the most superficial of descriptions for that is quite all that I am capable of seeing. In these articles are technical discussions which so far as I am concerned have no place in the lay press though the intelligent layman might disagree. Here again, I offer the floor to such intelligent laymen as may be present. As for myself, I cannot imagine that there are half a dozen persons in Macon who would not be completely lost in these morasses and I think this a very generous estimate. If these periodicals were purchased only by those they are purportedly written for, they wouldn't last for two issues. The fact is however that countless dumb ones also buy them hoping thereby to be considered intelligent laymen. This pitch by the publishers is sure-fire; as certain as human vanity and as permanent as humanity.

I can say with all honesty however that there is pleasure in the reading if you don't strain to understand things you are not equipped to understand and can train your ego to accept a far lower estimate of your intelligence than it would wish for.

**Women and Their Case Against Men**

John Stuart Mill, 100 years ago said "everything which is usual appears natural (so that) the subjugation of women to men being a universal custom, any departure from it quite naturally appears unnatural." Mill was one of the very few great male defenders of women's case against men.

I suppose most if not all of us have been thankful that we were not born female but we probably did not dig very deeply to know why we felt that way. Superficially, we simply understood that this attitude was natural and let it go at that. This is true as far as it goes which is, however, not very far. I have read that a prayer recited every day in the synagogue by the men is this: "Blessed art Thou, O Lord, for not making me a woman."

Before we go on, it might be of interest to look into some of the differences between male and female from early in the gestational period. The chances of creating a genetic male at the time of conception is greater than that of a female because sperm bearing the Y chromosome are more numerous than those bearing the X. This, however, is only the first of four major events that are required for the developing fetus to become a male. The next step is the development of the testes. The sex organs appear in the embryo as two ridges on tissue composed of 2 layers - outer and inner or cortex and medulla. If the medulla develops, it will produce testes. Apparently, some special secretion is require to develop the medulla since if for some reason or another this secretion does not appear, the cortex develops into ovarian tissue. Furthermore, after the testes are formed, they must secrete certain substances including androgens for the embryo to become male.

In spite of these complicated steps and a 12 percent higher mortality rate in utero, approximately 106 boys to 100 girls are born. Gestation period appears to be slightly shorter for girls. Girls enjoy a 32% lower mortality rate in the first week of life and are less subject to sudden infant death.

Baby boys usually cry more, are more active, more demanding, and less interested in sleeping. Girls smile more often, and are more sensitive to touch and sound. Girls pay more attention to pictures of faces while boys seem more attracted to geometric shapes.

When sitting on the ground, girls tend to draw objects toward them while boys push them away. It has long been known that girls mature more rapidly than boys. Boys usually excel in solving problems and storing information while girls are superior in recognizing similarities between different objects. Scores on standard intelligence tests show no appreciable difference in the IQs of the sexes. Of some small interest is a condition due to overactivity of androgenic steroids of the adrenal glands. This occurs in both males and females and these people tend to have much higher IQs than average. It is thought that perhaps prenatal exposure to excess androgens may promote intelligence. This being the male hormone, you may draw what conclusion you will regarding this fact.

Of more importance is the finding that females are more resistant to infectious diseases than are men. Having two X chromosomes gives her more of the immune globulins for a locus on one or more genes of the X chromosomes determines the quantity of immunoglobulins. This is further supported by the fact that women having three chromosomes (the so-called super female) have an even higher level of immunoglobulins.

Another striking sex difference is in the death rate from heart disease which is 3.25 times as high for white men as for women in the 45-64 age group. While feminine endocrine and other constitutional factors exert some protection effect, the stress to which men are exposed is an important factor in the discrepancy. Dr. Estelle Ramey, endocrinologist, says "Women can help their men live longer by relieving the great stresses our culture imposes on them. Men need protection and women have been delinquent in not providing it." Stanford psychiatrist Dr. Donald T. Lunde makes the statement, "There is no evidence that men are any more or less qualified by biological sex differences alone to perform the tasks generally reserved for them in today's societies."

How did this assumption of superior status by the male come about? What Mill had to say about the seeming naturalness of the relationship was true but he said nothing about how it all began. Levistronos, the anthropologist, simply states "Public or simply social authority always belongs to men." The custom was so established before the dawn of recorded history. Jewish tradition was almost exclusively masculine. There were heroines in the Old Testament such as Judith and Esther but it is felt that they were written up in this light because of some sensitive man's sense of guilt at the degraded position of women in actual life. At least one essayist says, "There are some injustices that seem ordained by nature." Another factor considered by some is that of the sexual roles - the man active, the woman passive. If the question is posed to the modern popular philosopher, he launches into a learned discourse which leaves the question as unanswered as it was before.

I have read nothing offered by a first rate mind. I quite well may not have looked in the right place but I think it possible that it is considered not worth their time and is not really a subject for philosophical treatment. The thing has been as charged with emotion by the leaders of the Liberation movement that one is inclined to think of them as coldly methodical tigresses. I was somewhat comforted by an incident that occurred on the Convention's floor in Miami. The occasion was the refusal of McGovern forces to incorporate an abortion plank into the Platform Just prior to this, McGovern had already disappointed the women by backing the South Carolina delegation, and this was simply too much. Gloria Steinem, most intellectual of all the movement, called them "Bastards", broke into tears and had to be led from the floor in the middle of the abortion debate. Using the epithet Bastards is asexual but having to be led from the floor in tears is strictly otherwise. Betty Fridan contented herself with "We were cynically misused." Bella Abzug was not quoted. If she said anything it was either un-newsworthy or unprintable. I had not intended looking for opportunities to poke fun at any of these people but I couldn't resist this particular episode. I would agree that it doesn't prove any weakness of spirit or purpose. They are still women - at least Steinem is.

If one subscribes literally to the Biblical theory of Adam and Eve then one must agree that they were each possessed of a conscience and the knowledge of Right and Wrong. They also possessed all the faults, after the Fall at least, of all human beings. If this degraded position of woman that is spoken of today began here then the fault lies with Adam and was quite naturally handed down as the natural relationship between the sexes. I think it all began long before Adam, and the pattern had long since been established by the time the complete prototype man appeared. Primitive man is, I think, presumed to have appeared at some time during the Ice Age which is said to have existed from one million years ago to 25,000 years ago. He endured because of some ability to think and learn. He could use his hands and make tools. Food had to be gotten and protection against animals and other men had to be provided. I would assume that the women were kept pretty well pregnant, it was cold in these times, and it was probably not long before the cave was pretty well filled with offspring.

I don't know what the neonatal death rate was during those times. It may have been high but certainly there were survivors that had to be tended to and nursed. One assumes that the women possessed some degree of the natural instinct or none of us would be here. All this then kept women pretty busy around the house and the more romantic activities such as hunting and fighting were left to the men. It was simply that the strongest sex physically was not so tied down as the other and quite naturally developed, gradually perhaps, a feeling of superiority which is the state of mind of any of those who go around and do great things such as caving in the skull of an opponent or ganging up on a wooly mammoth.

The use of tools developed during this period and although you read only of "Man" being involved in this development you can bet your last dollar that there were some labor saving devices around the place that were the exclusive product of female ingenuity. I would not by any means put the wheel beyond them. These however were not the tools of heroes and were probably looked down upon as very second rate by the Great Warrior. I would hazard a guess however that if these were ever admired, by a visitor say, that this same superior being would take the credit and the lady of the house figuring it would not be worth the hassle would let it go at that.

Given the circumstances, particularly the almost entirely physical nature of the life, it seems absolutely impossible that any other relationship could have developed. The activities of the sexes automatically fall into two distinct categories and given this separation, it only remained for one to gain the bulk of authority and ascendancy over the other. The culture being physical, as has already been said, I don't think it takes a great deal of imagination to see how this more or less quiet household battle would work out. At this point it would seem to have been more by the man of the house but I have no doubt that there were countless daily skirmishes won by the woman who probably learned early how to manage it in such a way that the man felt that at worse he had earned a draw. Her wits were undoubtedly sharpened by her lot much more rapidly that could have been possible in the case of man. It may have occurred to some or all that they were getting the short end of the stick. If so it must also have occurred to them that any likely alternative would be worse.

The story of the Amazons and other societies dominated by women are myths. There have never been such societies but there have been and are so-called Matriarchies a quite different thing. I think it might surprise you to know how involved and varied other institutions can be and how much controversy exists among students of social theory about them. The ultimate matriarchy would incorporate female dominance, female kinship, and female inheritance. Apparently no one thinks that such exists anywhere in the world. Women do have far more influence in some societies than in others - the Iroquois tribe for example were or are matriarchal, and women played an important part in government, especially in the selection and dismissal of chiefs. This is also found among many other Indian tribes.

Matrimony, which is the reckoning of kinship, descent, succession and inheritance in the female line still survives in various parts of the world - Sumatra, Micronesia, Melanesia and others. Sometimes the group is matrilineal (but patrilocal - that is the wives settle in the husband's village - or it may be matrilineal and matrilocal. Other situations may also be matri-patristic where the female has authority or the opposite - patri-patristic, the usual or male authority. The frequency of matrilinity in primitive societies is due according to some to the fact that in these groups, "paternity was a matter of inference as opposed to maternity which is a matter or observation." None of them so far as the Encyclopedia Britannica contributor goes, concedes any general ascendancy of women in any society.

In these primitive societies, the life style is mostly on the physical side and authority in such a culture is always on the side of the male. The reasons for the higher status of women in some than others is not always apparent.

As we became relatively more 'civilized', it seems that, to the casual reader at least, it became necessary for the male to resort to more devious means to maintain his role as the dominant one. Women were not afforded education except in those things that confirmed them in their position of 'housewife'. Not until well into the 19th Century were women allowed to attend college in England and America. What women were or supposed to be was pronounced by men, and so it was.

In most of these pronouncements by men - priest, saint, psychiatrist, philosopher - the most virulent anti-female bias that can be imagined was visible. They were the reaction of men who had been jilted, outdone, or completely frustrated by women or a woman. It is difficult to see how a man in full possession of his faculties and emotions could affirm publicly such diatribe. Witness:

Pythagorus wrote, "There is a good principle which has created order, light, and men; and a bad principle which has created chaos, darkness, and women."

Aristotle - "They are female by virtue of a certain incapacity - they are weaker and cooler by nature than males and we must regard the female character as a kind of natural defectiveness."

Cato the Censor told Roman men, "If you catch your wife in adultery, you would kill her with impunity without a trial, but if she were to catch you, she would not dare lay a finger on you and, indeed, she has no right."

St. Ambrose - "Adam was deceived by Eve, not Eve by Adam. It is right that he whom that woman induced to sin should assume the role of guide lest he fall again through feminine instability.

St. Thomas - "Woman is defective and accidental, a male gone awry." She is the result of some weakness in the father's generative power or some external factor like the south wind which is damp.

Lord Chesterfield writes of women as "Only children of larger growth; they have an entertaining tattle - a man of sense only trifles with them, plays with them, humors and flatters them."

Women, who in the 19th century demonstrated against the inhuman conditions in the mills of Manchester England, were castigated as 'degraded females' who had 'deserted their station' and shed the 'sacred characters' of wife and mother.

To Schopenhauer, women were ". . . childish, frivolous, and shortsighted," and existed ". . . solely for the propagation of the species."

Nietzsche spoke against their ". . . pedantry, superficiality, presumption, petty licentiousness and immodesty."

Charles Darwin found women constitutionally inferior to men in anything ". . . requiring deep thought, reason, or imagination or merely the use of the senses or hands."

Sigmund Freud considered women as insufficient or defective creatures whose entire psychosexual life was shaped by her having been deprived of a penis and whose moral and social existence was marked by envy, insincerity, an undeveloped sense of justice and honor and an incapacity for the higher human tasks. He chose to think that his stand on this was scientifically justified, not once, so far as is known, considering the possibility that prejudice had anything to do with it.

One reads of such folktales and beliefs of early medicine as that male chicks developed from ovoid eggs - the ones closest to the perfection of 'eggness'. In the middle ages, Albertus Magnus thought that males came from spheroid eggs as the sphere is the 'perfect" geometric figure. It was also believed that boy babies developed on the right side of the womb, girls on the left, the sinister or evil side.

The great majority of women assuming the 'natural' or customary order, educated to no other possibility and pushed from infancy toward marriage and family, have accepted this status. The liberation movement is challenging this definition of female nature and duty and alienating many, including women, by their militant stand on such things as marriage, lesbianism, and abortion.

Rousseau, 200 years ago, said "the whole education of women should be relative to men. To please them, to be useful to them, to win their love and esteem, to bring them up when young, to tend them when grown, to admire and console them and to make life sweet and pleasant to them; these are the duties of women at all times and what they ought to learn from infancy." More recently, Dr. Spock wrote, "biologically and temperamentally, I believe women were made to be concerned first and foremost with child care, husband care, and home care."

Through the years however there have been a few of both sexes who spoke out against the system or some expression of it. Engles, a century ago, spoke of the economic exploitation of women by men. Chaucer had one of his female characters say in effect and apropos of women's silence in matters sexual, "By God, if women had written stories they would have written of men more mischievous than all the mark of Adam may redress." Virginia Woolf observed that "Women have served all these centuries as looking-glasses, possessing the magic and delicious power of reflecting the figure of man at twice its natural size." Stendahl said 150 years ago, "All the geniuses who are born women are lost to the public good."

Harriett, the wife of John Stuart Mill wrote, "We deny the right of any portion of the species to decide for another portion, or any individual for another individual, what is and what is not their 'proper sphere'. The proper sphere for all human beings is the largest and highest which they are able to attain to."

The emergence of Christianity seemed to have raised the status of women much beyond that which obtained previously. The church enforced monogamy and was the first institution to defend women's right to inherit property. Monastic orders for women were the only alternative to loveless and often tyrannical marriages. St. Paul said, "There is neither Jew nor Greek - slave nor free - male nor female - for you are all one in Christ Jesus." But the church mistrusted the physical - the flesh - and hence had a deep suspicion of the body, and hence of women. Women may have been spiritually equal, but generally the clergy, in all positions high and low, considered them each an invitation to hell.

**Anniversary Observations**

It has become increasingly and sometimes painfully obvious over the past year or two that the task of holding the attention of a certain group of allegedly civilized people who shall be nameless is one to make the stoutest blanch and quail.

In such a situation, three courses are open to one faced with this chilling prospect: (1) He may just sit and blanch and quail; (2) He may knock himself out in a valiant endeavor to over-ride this sublime indifference; or (3) He may in the true - the original spirit of the claptrap club - say to hell with all that and pick a subject which will be an affront, or preferably an outright insult, to his colleagues or one in which he alone is remotely interested. I have chosen the latter or the third course, not that I mind insulting particularly, but that lately I have come to realize that the topic I have chosen is most timely for me and, I am sorry to say, will be for all of you sooner or later - namely the approach of the sere and yellow leaf, or to put it bluntly the prostatic arteriosclerotic, in short the tri-metallic era of our lives: silver in our hair, gold in our teeth, if any, and lead in our fannies. One does not approach this state, or at least the realization of it, gradually so that one becomes accustomed to the idea; it suddenly bursts upon one's consciousness with all the gentleness of a volcanic eruption and psychologically about as devastatingly. It is difficult to say just what triggers this sudden, profound change in one's way of thinking. It is not necessarily any sudden physical change, though I suppose this occurs. It may be a minor experience, unimportant in itself, which diverts the consciousness suddenly away from a state or train of thought which is essentially youthful and into the unglamorous musings which are the cast and mold of old age. One may even awake one morning having undergone this transformation during his sleep and not know why or how. Youth today - old age tomorrow.

It may be said with some justice that a man of fifty-one years cannot be said to have entered into old age, but I maintain that when this mental change takes place the character and color of his thought will differ in no wise qualitatively from that of age sixty, seventy or even eighty. This outlook is essentially that of the homeward bound rather than that of the sallying forth and he becomes cautious lest the course become adventurous and he be forced away from familiar landmarks which give him the feeling of safety. It is almost as though he felt that if he continued further outward he would reach a point of no return or drop off the end of the earth as Columbus' sailors thought. At any rate one thing can be said with certainty - he is through with adventure and this is perhaps the evidence of change.

This desire for safety is compounded of many things, a basic fatigue of the bumps of curiosity, the sad thought that all is not gold that glitters and the memory of many well laid plans that ganged agley, in short a sort of cosmic neurosis the result of repeated frustrations. In youth, frustration provokes aggression. In the state in question, it induces a negative sort of response wherein there is no frustration because there is no overtness if I may use the word. He who expects nothing and essays nothing is not often disappointed.

When this turning point comes one is momentarily stunned but bye-and-bye he begins to rally and like the furious leaps and rushes of a well-hooked fish he sets out to prove to himself that it is all a mistake, a momentary mental aberration resulting perhaps from constipation or a lack of vitamins or biliousness but he knows that even though he is bilious, avitaminotic and constipated that this is not the cause but is often part of the condition or simply coincidental.

The purely physical side of this, most are inclined to think, is all there is to aging and old age. It is not this side with which I am at present most concerned for it is obvious that one does not leap overnight into physical decrepitude, barring coronary occlusion and the like. This is not true of the emotional side and it is here that aging first becomes apparent. It may not be obvious to the observer for every effort is made by the subject to cover up his feelings. Sometimes this is overdone and the poor fellow begins wearing fancier clothes, tints his hair or in the absence thereof procures a skull rug. Most however make no such over-compensatory efforts but perhaps begin cautious joking about how old they are and how far over the hill. They are boosted no end by the occasional listener who demurs and tells them they never looked better or younger. They are perhaps fishing for this very answer, but the fishing, never too good, gets poorer and poorer.

They begin taking stock before the mirror, but this is so unrewarding that it is not persisted in for very long. The double chin, the bald spot, the paunch, the skin that begins to look as though it were fitted by a very poor, or at least a temporarily insane, tailor does not bring one back to the mirror except after such a time as one begins to feel that his last assessment was perhaps a little pessimistic. He is again shaken not to say shattered by what he sees.

Most then give up and console themselves by saying that at least the old head is still ticking away. But he is not certain that this is so and he begins testing himself in little ways. He sits before TV and joins the quiz programs without, of course, letting anyone know that he is even remotely interested. He seems to remember that not so long ago he was pretty good at it but to him the fact that he didn't click them all off just like that makes him fearfully suspect that he is slipping upstairs too. He becomes a little preoccupied with keeping what he suspects hidden from other people. This state of mind can and usually does grow and can actually impair mental efficiency to a considerable degree. Any mistake he makes he attributes to his failing faculties. He is apt to become over cautious, he is loath to tackle anything new for fear of failure or partial success, both of which are doubly painful to him because of what he feels is the cause.

He feels that he is having a harder and harder time covering up and indeed is certain that some at least must know that he is on his last lap.

However certain he may be that he is slipping, most have enough insight to feel and hope that things can't be as bad as they seem. This is small comfort because for one thing he is never able to convince himself that such is the case and for another he knows that in all reason he can expect a lessening of mental vigor as he grows older and he is not going to be able to judge how much it is at any given time. He hopes it is less than he thinks but he is afraid it might be more. He tries to console himself with the thought that if he had slipped very far, his capacity of realizing it would be less; therefore he can't have deteriorated a great deal. This does not afford much comfort because it is not always the case and of course he is one of the not always. He is the unwilling cherisher of a fact and a fear. The fact that sooner or later he will deteriorate and the fear that it has come and he is probably well along. It is not beyond comprehension that one should after a time become mildly paranoid and feel that people must be talking about 'poor old so-and-so' who is becoming somewhat balmy and hasn't sense enough to realize it.

How does one act under these circumstances? Obviously the greater the effort to act as though nothing has happened the poorer is the effect, and one may actually seem almost as balmy as he fears he is. One may actually catch oneself overdoing the effort to be himself, or what is not quite as bad, not know at all how to act like himself. It's like trying to walk by telling each separate muscle involved in this intricate procedure when to contract and when to relax instead of letting it follow the brain pattern developed unconsciously in childhood. One may walk, but it would be a caricature of the real thing. We are never consciously ourselves. Once it is brought into consciousness it becomes a caricature, varying perhaps in degree, but still a distortion.

Thus one always becomes somewhat unsure of himself. This in some cases may be a blessing but if so it is simply fortuitous for it is born of fear and not of common sense. He feels that his work is not as good as it once was and he approaches new problems with somewhat less confidence than he feels was the case before.

I have discussed this with various ages and some think that one's standards have risen too far and it is this rather than any deterioration that brings about this state of mind. If so this indicates a loss of insight which is indeed perhaps the first faculty to go. I am sure that all welcome this explanation for this unhappy condition and clasp it to their bosoms with glad - if silent - cries. But on second thought our hero, as if reluctant to give up his morbid fears, damns it as rationalization and only hauls it out to look at when he really feels desperate.

As mentioned before, insight is impaired and one is going through the negative phase of insight loss. It is certainly there that the middle-aged mind is not as receptive or as retentive as in the younger group and it is the occasions where one sees this slowing up that his fears begin and insight goes glimmering. He immediately becomes depressed and relegates himself to the has-been class. His hopes of becoming what his parents expected, however modest that ambition might be, have gone. He has not found the answers to questions he has been wrestling with, off and on, since he was old enough to ask himself anything more important than what to wear to a tea dance. He racks his brain to think of one goal achieved, he has always been working toward goals of one kind or another it seems but he can't remember having crossed over on any important thing. Inside the ten yard line a time or two maybe, but then everything went black or something like that. He feels that at his age that life if not an open book to him should not be a completely closed one either. He is a little hurt.

The road seems blocked and any movement must be horizontal instead of up or, as he fears, down. Such a clipped-wing existence does not appeal even though, in truth, if he had the wings of a B-52 he probably wouldn't ever get more than three feet off the ground. But as long as possibilities existed, he was happy and content to stagger along a victim of the manana disease. Well, tomorrow has finally showed up and what a cold grey dawn it has. Noontime will obviously be worse and one's mind recoils at the thought of its nightfall.

I have called this the negative phase of insight loss, meaning that being unable to evaluate oneself, even as poorly as this is done normally, one is more prone to underevaluate than otherwise. I think this is true, for the outlook from a pit of depression is seldom optimistic and it seems reasonable to me that this would be the case far more often than the opposite. This phase while very painful and actually damaging to the personality is much less revealing of deterioration than is the positive phase of loss.

In this phase it seems to me that there is complete loss not only of insight but considerable impairment of one's contact with reality. In fact, depending on the degree of impairment, one may be said to entertain delusions of grandeur. I am not sure that more than a very minor degree of this opposite swing of the pendulum can be properly fitted in the picture drawn. An extreme degree is of course psychotic, even the moderate degrees probably indicate disorganization of the psychic beyond the degree intended to represent a phase of the changing mental attitude of aging persons being described here. The minor degrees may represent a more or less natural rebellion of the mind against a painful state and to this degree probably does not indicate severe impairment.

It is slightly comforting to know that interest in the problems of aging is rising and that Geriatrics as a specialty is assuming more and more importance. The emotional problems are being studied by psychiatrists and some strides have been made in trying to disentangle the organic from the purely psychic manifestations. It seems that in the past we have been too prone to write an older person off as hopelessly befuddled when he is actually salvageable. "Any deviation from normal is ascribed to softening of the brain," a layman's diagnosis that I have been hearing all my life and probably used too often by the medical brotherhood.

I regret to say that it is not through any feeling of warmth toward the aging that this interest has arisen. It has been forced upon us by the rising life expectancy and actually it is an effort on the part of all to avoid what might well be an intolerable situation - the presence of a large and rising proportion of querulous, chronically ill, demanding and unreasonable older persons.

In 1850 the life expectancy at birth was 40 years. In 1954 this had risen to 70 years and it is predicted that by 1975 there will be over 21,000,000 persons over 65 years of age in this country.

The connection between this and the ideas expressed in the first part of this opus is that the feelings entertained at age 50 are magnified and fixed in later life. It appears to me that the time to start psychotherapy or at least mental hygiene is during the middle years where ideas may become fixed. Much is made of psychic damage that is done in infancy and childhood which impairs or destroys ability to adjust later in life, bearing of course organic damage of more than minor degree. Sooner or later the efforts spent in resolving these difficulties in the aged will sift down lower in the age scale and some efforts at prophylaxis will be made. This is as proper here as it is in any other public health endeavor.

With this increase in the aging population, respect for gray hairs has declined precipitately. There are too many gray hairs for them to impress. An economic system which puts a premium on vigor and with changing technology in an industrial era minimizing experience, the role of the elders in a community becomes of less and less importance. P.M. Hauser states that the transition from a rural to an urban society with its "diversity of social worlds, racial and ethnic groups, languages, institutions, economic levels, patterns of conduct and thought" undermines the importance of the senior citizens as the carrier of the traditions of experience and wisdom".

There is scarcely room in the present day home for three generations and this does not provide the security and familiarity of a home setting to the aged members. The factors upon which good adjustment in old age depends are lacking at least in the degree necessary.

The three aspects of old age of chief concern to the individual are maintenance of income, health, and social adjustments. The latter of these is being looked at here. It is true however that if any of these three factors are greatly deficient the possibility of growing old gracefully is extremely small.

One entering this phase is in a strange new world and adjustment strains even the hardiest adaptive mechanism. The difficulty in obtaining work, the usual breaking up of the home and marital situation, the loss of friends through death, the sense of uselessness and not being wanted and the consequent loss of self-esteem makes for a situation which would be likely to break down a much younger and more resilient personality. The young are sustained by hope and the confidence that they and things will be better tomorrow. The old have no such thing to cling to and when you think about it this is about all that keeps any of us trying. It is apparent that to remain at all stable emotionally these people must have a foundation of maturity that I am afraid is rare indeed. Those who were able to meet crisis in their younger days are more apt to meet the new ones with greater efficiency. Brande says that the inadequate will either "deny to himself that his adaptive mechanisms no longer apply, blindly repeating his ineffective behavior or withdraw within himself and spend his days ruminating about the time when those mechanisms would work." His failures he must then blame on the lack of understanding, sympathy or intelligence in the social situation surrounding him".

Awakened interest in state hospitals, as regards over-crowding particularly, has shown that these institutions have been the dumping ground for aged persons many of whom are not so crippled physically or mentally that adjustment outside is impossible. In many places criteria for placement have been revised and it is becoming more difficult for families to get rid of these burdens by shifting them to the state without good evidence. The treatability of emotional disturbances in many senescent patients is a fact and in many cases these disturbances rather than organic deterioration, have been the chief factor in breakdown of adjustment. I think it is also true that organic deterioration is hastened by continued maladjustment and brings closer the point of no return.

Trends favoring the aging such as abandonment of arbitrary retirement age, etc., are seen here and there but this is the exception and emphasis is placed overwhelmingly on vigor, innovation, invention and "progress." Adams places this last word in quotation marks and with good reason. I think, for who knows what progress in the true sense actually is. He states that now there is "little place for what is outworn or outmoded" but fails to record the criteria by which these states are determined.

Adams states definitely that before the question of possibility of adjustment is entertained in any particular case, the role of organic degenerative cerebral factors must be placed in proper perspective. The effect of these changes is to produce deficits in cortical function. In the advanced degree impairment of memory is severe, orientation for time and place is disrupted and the capacity to calculate and to concentrate is lost. Actual motor deficits may exist. With these symptoms such deterioration is evident but, as Adams further states, to attribute to these factors the determining role in the development of mental disease in the elderly is erroneous. It is well known that there is little correlation between the degree of degenerative change seen at autopsy and the pre-existing mental status. This suggests that the picture of the goofy oldster which has been painted with the idea of irreparable physical changes in the brain as its only basis is frequently and probably more so than otherwise, wrong.

A pyramid of severe symptoms may be built on a comparatively small base of normal aging changes manifested by slowing and increased fatiguability of the mental processes such as attention, concentration and apperception. Thus it is that in a rapidly changing series of experiences these people become confused and give the impression of being unable to comprehend the simplest thing. A strong personality may be able to accept these changes without serious impairment of the personality, more commonly a defense is set up by denying to oneself the existence of these deficiencies, hence holding in abeyance the anxiety engendered by their acceptance.

In some, neurotic or psychotic tendencies which had previously been more or less hidden by compensation tend to break through. Those that have been precariously balanced emotionally, no matter how successful they have been materially or in compensating for their ailment, are exceedingly vulnerable. Among these personalities that are most apt to disintegrate is the obsessive-compulsive type. Their reason for being has been their pride in accuracy and precision. They are not adaptable and their personalities are rigid. Their satisfaction in life has come from adherence to rigid standards; they have no capacity for healthy compensation. When their performance fails to meet their standards they are completely shattered and with no resources to fall back upon. There is little here to work with but it is still primarily emotional. These people usually break long before deficiencies, all too apparent to themselves, are gross enough to be noticed by others.

A second type, almost certain to collapse are the markedly dependent personalities; they remain immature to an extreme degree and it is emotional maturity which is the key to salvation.

These people have lost control of themselves and have lost control of their environment as it relates to themselves. The more tenuous their hold has been on both in earlier life the more easily overwhelmed they are by conditions which necessitate and alter their capacity for adjustment. No problem is met with resourcefulness; it is either taken blindly head-on or is avoided entirely depending on the personality. In both cases frustration is the usual result spurring the one on to more reckless behavior and causing the other to withdraw further away from reality. The environment thus becomes master and having lost control of themselves they sink sooner or later into a vegetative existence wherein they do not attempt to think at all.

The necessity for some activity, some duties and responsibilities to maintain some measure of self-esteem in these people is fundamental in handling the situation. I think all are agreed on this but in the application of the principle little or no thought is given to consulting the object of these efforts. The approach is entirely pediatric, or, more properly perhaps, pedagogical. Despite protestations to the contrary it is obvious that even the most ardent champions of a new deal for grandpa still consider him basically a drooling infant or simply a medium grade moron and do little more than give him blocks to play with. It seems to me that this might do more harm than good to a great many capable of better things than pinning the tail on the donkey or cutting out paper dolls.

Richard H. Young, Professor of Medicine at Northwestern University Medical School says "Experiments in individual and group counselling services for the aged, adult education programs and participation by industry in providing pre-retirement programs must be expanded. There must be community provisions for assisting older persons to find employment, housing and recreational outlets through activity centers and for assisting chronic invalids to find care" and again, "They need to have their capacities rather than their incapacities recognized and their human dignity sustained."

**Arctic Explorers**

There are many types of personality that I did not understand and have not understood except when as a boy I was intensely interested in and sympathetic with such fabulous characters as Tom Swift, The Rover and Newton Boys and others of that stripe, both real and fictional.

High up in the list of those not well understood by me, at least in my middle age, are Arctic explorers and mountain climbers though I do feel that the former are of a higher order generally than the latter.

The story I have to tell tonight is about one small group that set out to reach the North Pole; the obstacles that beat them back; and the retreat which in itself was a triumph of courage and strength. It is also, as you will see, an indictment of those so-called authorities who carry their obligations lightly.

Because I do not understand these people is not to say I do not realize their value as contributors to the sum of human knowledge, both practical and academic, nor is it denied that they are very necessary on many other counts. They are, however, a race apart and in reading of them, one feels an unpleasant sense of being very small indeed.

The expedition in point is one of which some of you have never heard, as it was unsuccessful to a most extreme degree so far as attaining its goal was concerned. As an ordeal which was magnificently withstood to the last, it shows a side of human nature that we do not often see. George Washington De Long was a graduate of the U.S.N.A. who, during his early years after graduation, had taken part in a rescue expedition detailed to find the survivors of the Arctic Expedition which had sailed in the Polaris which met with disaster.

This experience whetted his appetite for Polar explorations and he began laying plans which included putting the bite on Jas. Gordon Bennett, owner of the New York Herald, and something of a character himself, for the money. Mr. Bennett who had instigated the successful search for Dr. Livingstone, and who was still aglow from that triumph, was ripe and De Long plucked him.

In these matters the Navy cooperated to the extent of furnishing personnel and help in converting the ship to its new category. The ship was also commissioned in the USN but Mr. Bennett picked up the tab for all actual expenditures.

De Long chose a ship which had been an auxiliary in the British Navy and subsequently owned privately. Almost to a man, the experts at the Mare Island Navy Yard pronounced her unsuitable, but De Long was satisfied and after extensive alterations including a wrought iron sheath for the stern, a fitting for the bow of Oregon pine timbers, filling it solidly, and reinforcement of the hull of the ship by Oregon pine bringing the total thickness to nineteen inches.

The Captain, Executive Officer, Chief Engineer, Surgeon, and Navigator were Regular Navy. In addition there were a naturalist, an ice pilot, a reporter (at the request of Mr. Bennett) who on the strength of having edited the weather column in Mr. Bennett's paper came along officially as the Meteorologist. These civilians were classed as Seaman on Special Duty but were treated as officers. The crew was chosen according to De Long's orders to take Scandinavians preferably, English, Scotch and Irish if unavoidable, but absolutely no French, Spanish or Italians.

In early June of 1879, the Navy Yard authorities stated that insofar as practicable, she had been prepared for service in the Arctic Ocean. This dubious assurance did not seem to bother De Long.

The ship had been prepared on the West Coast because the attempt was to be made by way of Bering Strait. De Long was influenced in this decision less by the failures on the Atlantic side than by two theories supposedly soundly based. One was that the Japanese current split as it passed by Kamchatka; one portion sweeping eastward to warm Southern Alaska and the Northwest, while the other passed through Bering Strait and northward to prevent the formation of an ice pack for a considerable distance toward the pole. The other was that Wrangel Land stretched northward over the Arctic Ocean and reappeared as Greenland on the Atlantic side. Thus two methods of fairly easy approach might be available.

Departure was on July 8, 1879 and although San Francisco turned out en masse to bid them farewell, there was not a single Naval vessel present to see them off. The Navy tug Monterrey which had come down on other business failed to toot its whistle or dip its ensign. This nettled De Long no little as it would any other regular navy man.

It soon became apparent that the ship though tough and strong, was no sailor making only about 3-4 knots and needing the assistance of the engines to go from one tack to another. She was no steamer either, and at 4-5 knots - her best speed - she burned 5 tons of coal a day. This was even worse than her poor sailing qualities, for coal supply was limited. Fortunately, De Long had arranged for an escort ship to re-coal them again at St. Lawrence Bay in Siberia. In addition, because of her construction and her heavy load, she had only 24 inches freeboard amidships, and instead of rising to any wave, she simply plowed through, deluging everything and everybody topside.

Charts furnished by the Imperial Russian Hydrographic Office were depended on to carry them safely through the Aleutians. The charts were worthless. They showed islands that were not present, did not show islands that were, and those it did show were found some miles away. In spite of all this the Jeannette finally made St. Lawrence Bay, took on coal and said "good-bye" to her escort.

Wrangel Land was itself somewhat hypothetical. Its discovery was reported by the Russian Admiral Wrangel some years earlier but confirmation had not been to the entire satisfaction of the world. However, it was toward this more or less substantial mirage that the Jeannette set forth on August 27th.

The Jeannette's troubles began almost at once. Ice was found much farther South than had been expected and a little beyond lay the solid ice pack seven feet thick. To conserve the precious coal, the fires were banked, and with sails set, a westerly course along the pack was taken in the hope of finding a break in the ice into which the ship might be turned north.

Her progress was slow but visibility was nil and that night she ran almost head-on into an outcropping of the pack. She was without steam and was being ground against the ice which in spite of her stout hull would shortly knock her to pieces.

Through the superhuman efforts of Chief Engineering Officer Melville and his crew, steam was raised in about thirty minutes, and she pulled away without serious damage to a respectful distance.

The hoped-for lead, or break in the ice pack, was found a few days later and the Jeannette began the hazardous trip up the narrow canal. Progress was slow and it was necessary to detail a "shore" party to walk along on the ice, hauling a hawser attached to the ship and snubbed around a convenient ice hummock when a sharp turn had to be made. At other times it was necessary for the ship to become an ice breaker to get through the comparatively thin new ice that was beginning to form over the lead.

After several days of this tedious progress, land was sighted and presumed to be Herald Island not far from Wrangel. Having one of the few clear breaks in the weather, land was sighted west of Herald Island and identified as the Russian Admiral's discovery.

It was obvious that reaching it by ship was impossible so, anxious to scout the region, a dog sled party was sent out to make a survey. They never reached land however because of the numerous open areas in the ice.

Temperature began dropping rapidly at this time and shortly the Jeannette was frozen in tightly and for the Winter. This was a bitter disappointment for all because of the early onset of Winter that year and the fact that they had gotten no further than latitude 7l degrees North, a point having been reached on several occasions previously by sailing vessels. To make matters worse, a shift in the ice gave the ship a 9 degree list to starboard which was maintained throughout the Winter. Some cheer was had by the news that the pack itself was moving northwest at the rate of about two miles per day.

Collins, the reporter-meteorologist who was disliked for his puns and his general attitude, now began to prove what an SOB he could be. He was insubordinate and insolent; he shirked his work and wound up with delusions of persecution, though he was of course not actually psychotic.

The monotony of the situation was broken on several occasions by colossal upheavals and spreading of the ice caused presumably by tides, wind etc. At least twice the vessel was in imminent danger of being crushed and the crew ordered to stand-by to abandon ship. Some of the chunks of ice thrown up by the commotion were as large as three story buildings, any one of which could have destroyed the Jeannette had it fallen upon her. Sometimes she was squeezed so forcibly that the decks bulged upward until the hull trusses took up the strain and prevented actual disruption.

There was an infinity of things to harass the Captain. He was acutely aware of the possibility of scurvy so he was insistent upon the proper use of the lime juice ration and prescribed a regimen of exercise for all hands to combat this potential danger. He was insistent that the drinking water contain only a trace of salt and when it was found that icebergs both young and old retained salt to a disturbing degree, it was necessary to distill the water. This further depleted the coal supply. It did not snow, so that source of potable water was denied them.

Bad luck in the form of sickness struck the Navigator, Lt. Dannenhower. He developed an eye infection which went from bad to worse. He was on the sick list and relieved of duty from then on.

Toward the end of the winter, the career of the Jeannette was almost terminated during one of the periodic crack-ups of the pack. Several seams were opened widely in the bow and, because of the reinforcement of timbers here, they could not be reached to be caulked. The water was rising too rapidly to be controlled by the hand pumps even if this had been feasible. Steam was necessary and, inasmuch as the fires had been put out and the boilers and steam lines had been drained for the winter, the situation seemed hopeless. To make matters worse, the sea cocks were frozen in the ice and the boilers had to be filled by hand - 9 tons of water hauled in buckets and up into the top of the boiler. This was just enough to cover the crown sheets and prevent an explosion.

In spite of the hand pumps, the water in the fireroom was rising and it became apparent that it would soon reach the fire doors and douse the fires. Nothing in fiction can surpass this scene and, as in fiction, steam was gotten to the pumps in the nick of time and the situation saved. All this took place in a temperature of 40 degrees below zero. Later a windmill was built to pump the water and thus save coal. This must have been a very efficient windmill for the ship was taking 3300 gallons of water an hour through the sprung seams.

To add to Surgeon Ambler's troubles, one of the seamen, Inerson by name, reported that mutiny was brewing which was not the case. He soon became frankly psychotic and had to be locked up.

As winter wore on, the monotony began to tell on the nerves of the ship's company. Someone did not like Mr. Melville's singing, another hated Dr. Ambler for slamming a door when it was in reality Ah Sam the cook who had done the slamming. The ice pilot was not speaking to the naturalist whom he referred to as "that damned Yankee pedlar", and the behavior of Mr. Collins became acutely unbearable. De Long made his efforts as mediator and peace-maker but with little success. He must have considered the situation inevitable under the circumstance and his only real worry was the aforementioned Collins who was speaking to no one but Dannenhower except to sass the Captain whenever an order was given. It finally became necessary to put him under arrest awaiting Court Martial to be held on return to the States.

Spirits rose somewhat when in the spring it was found that the northward drift of the pack was accelerating in speed and was proceeding in a straighter line than had been the case earlier. I fail utterly to see what there was in this information to bring anything but horror to these unfortunates. So far as the record shows it appears quite plain that they were already desperately beyond their depth and that anybody with an ounce of sense would go over the side and leg it south with what food was available. To me the news would have been about as cheering as learning my plea for reprieve turned down.

At any rate, this remarkable group were further chilled when on May 16th a new island was discovered at about latitude 77 degrees 61 minutes North latitude. It was promptly named Jeannette Island, and a second found several days later was christened Henrietta, the same being the name of Mr. Bennett's mother.

Having discovered these islands, De Long felt obliged to land on at least one and claim it properly. Henrietta was picked and Mr. Melville was detailed to take a small party and do the honors. The trip proved to be most hazardous and Mr. Melville returned after nearly losing his life with a crop of chilblains and the conviction that a trek back south over the ice would be a very long shot indeed. The island was twelve miles distant from the Jeannette and the round trip had taken six days - this with a light load and fresh dogs and men.

Surgeon Ambler had his troubles multiplied considerably by an epidemic of colic and diarrhea which, after much meditations and examinations, he diagnosed as Lead Colic. Mr. Melville set out to find the source and, after having broken a tooth on some foreign matter in the canned tomatoes, found that the solder with which the cans had been sealed had dripped into the contents. The stewing process had dissolved enough lead to poison the whole crew. This was substantiated by the fact that Ah Sam, the cook, had by far the worse case and also an uncontrollable yen for stewed tomatoes.

About the middle of June 1881 the pack began breaking up and the prospect of open water for sailing was eagerly awaited. This situation carried considerable danger however for the leads, or breaks in the ice, were apt to close up and if the Jeannette were fairly caught, she might easily be crushed beyond hope. At this point her bunkers held l5 tons of coal, three days steaming, and these people, well aware of her shortcomings as a sailor, were still trying to get their heads farther into the noose.

As might have been expected from the kind of luck previously enjoyed by this company, the Jeannette met her end. On or about June 12th, 1881 the massive walls of the lead into which the ship had been nosed began to close in. There was no nick-of-time rescue now, and the nineteen inch well-bulkheaded hull was broken like matchwood and it was only by heroic work on the part of the crew that the sledges and their cargo of food, equipment and boats were gotten over the side and onto the ice before the Jeannette's shattered remains were swallowed up by the Arctic Ocean.

The prospect facing the survivors was one unprecedented in the history of Arctic Exploration. The delta of the Lena River in Siberia was the closest point on the mainland and that was 500 miles away over ice hummocks and open breaks and no one knew how much open Arctic Ocean.

There was food for sixty days, three and one half tons, plus the three boats - vital necessities for the final water run - whose combined weight was four tons. Seven and one-half tons to be wrestled over the almost impassable pack. One officer was almost blind and on the sick list, the naturalist and the ice pilot had aged rapidly during the past few days - as who could blame them - and could not be expected to be of much help. The two Indians, Alexy and Anignin, were still suffering from lead poisoning, Collins the reporter was under arrest and not allowed to help even if he had been inclined to do so. The situation was appalling and particularly so to Melville who had made the ice run to Henrietta Island.

The first day after man-killing labor, it was found that exactly one-and-a-half miles had been made, and so scattered were the sleds and so in need of repair, that an additional 48 hours was spent before the hopeless journey could be resumed.

At the end of eight days, it was estimated by Mr. Melville that about five-and-a-half miles had been traversed. This was frightening enough, but you can imagine his horror when the Captain called him aside and informed him that while they had been struggling for that pitiful distance, the ice pack had carried them twenty-five miles further north than they were when they started. He was cautioned to say nothing to anyone else.

A revision of plan was necessary. The progress of the pack was northwest, so in order to reach open water by the shortest route, it was necessary to change course to the southwest. The almost-starvation rations were cut by a third and the next day a start on the new course was made.

On July 10th the sun showed itself long enough for the skipper to get a fix and much to his joy the ice pack had started moving south and instead of 16 the party had actually made 27 miles southward.

While cheered by this news, there were enough misfortunes to almost make up for it. Mr. Chipp gave out completely and had to be hauled along on a sledge; several of the dogs had fits and had to be cut out of harness; the Eskimo boats, with which the company was furnished, were solid with sealskin rawhide which, though fine on any ice or snow, quickly gave way upon being soaked by the numerous puddles in the ice. Ferrying across open leads, a terrific task, became much more frequent now that the weather was warmer and the ice rotten. Many of the men suffered mild hallucinations, seeing land in almost every direction and open water in front. On one of the ferries, 300 lbs. of pemmican were lost when one of the sledges crossing on an ice flow almost capsized.

On July 28th a new island was found and promptly named Bennett Island after their benefactor. Some time was spent here repairing the boats which had taken a terrible beating on the ice.

Soon after the trip was resumed, it became apparent that with the breaking up of the pack evidenced by an increasing frequency of leads, they would shortly be able to pack the sledges and take to the boats.

These were three in number; two cutters - one large, one small - and a whaleboat. Captain De Long in the large cutter was to carry twelve men with him; Mr. Melville and nine men took the whaleboat; and Mr. Chipp, conceded to be the best sailor in the lot, took the small cutter with nine men. The feeblest dogs were killed and two were chosen to go along. All the boats were badly overloaded and top-heavy.

Although to be accomplished with less actual labor, the trip ahead by boat was infinitely more hazardous than the killing haul over the ice. The first portion of the trip had to be made through fields of broken ice which constantly threatened to tear the small boats apart. It was necessary to constantly fend off with the oars to prevent damage. In doing so, a good deal of water was shipped and those not manning the oars had to bail frantically to prevent swamping. It was finally decided to burn the sledges and take a chance on there being no more hauls over the ice, it being evident that with the sledges the boats could not hope to navigate in any sort of sea without swamping.

On September 10th the party made Semenovski Island, the last stop before the extremely hazardous 90 mile voyage across the open Arctic sea to the Lena Delta. Their ordeals before reaching Semenovski were almost beyond description and the men were fast deteriorating. Skin-and-bones with raw, blistered hands and feet and scarred faces, they presented a picture of death itself.

On September 12, 1881, ninety-two days after the loss of the Jeannette, the three boats shoved off from Semenovski Island for the mainland. The large cutter under Captain De Long carried 14; the small cutter under Lieutenant Chipp carried 8; and in the whaleboat Chief Engineer Melville carried 11. There was a fresh east wind blowing and the temperature was just above freezing.

After passing out of the protection of the island into the open sea, the perils that confronted them became more apparent. Handling the boats in such water was very difficult, particularly so for Lieutenant Chipp whose boat was a slow sailor, full canvas being necessary to keep up with the close-reefed larger craft.

Mr. Melville's whaleboat was the fastest of the three, and in spite of continued reefing almost to the point of losing way and foundering, he pulled ahead of De Long's cutter. The Captain, seeing his predicament, waved him on in spite of his previous order to keep formation.

Mr. Chipp's boat meanwhile was plunging along under dangerously heavy canvas in an effort to keep in sight of De Long. The chance had to be taken as De Long's cutter could safely go no slower. As good a sailor as was Lieutenant Chipp, he could not foresee the engulfing wave that struck his boat laying her broadside to the sea, helpless and doomed.

Rescue was impossible and De Long and Melville, still within sight, stood horrified and impotent as the cutter disappeared into the trough of a sea to rise no more.

Sick at heart, Melville turned to the urgent task of saving his own boat. So much water was being shipped that even frequent bailing could not keep up with it. Finally a canvas weatherscreen was rigged on the weather side of the boat providing some protection against the seas constantly beating against it. Freezing and drenched, the crew was able to hold the water to a safe level. Several times every hour they almost shared Lieutenant Chipp's fate but somehow, miraculously it was avoided.

Later the wind suddenly increased and was soon of almost gale force. It became necessary to reef all sail and improvise a sea anchor using three tent poles, canvas, and a copper firepot for ballast.

After two days of this, during which time one man lost his mind completely, the wind abated somewhat and sail was again set. The gale had thrown them off course and their position was far from certain. However they headed in the general direction of the delta and hoped. It was certain that they would not be able to make the rendezvous at Cape Barkin as ordered by Capt. De Long.

Throughout the infinite and horrible trek south, the party had been spurred on by the knowledge that help awaited them at the Lena delta. Their belief was based on the writings of a Dr. Petermann who professed to know all there was to know about the Lena delta and who had also informed the world that Wrangel Land and Greenland were continuous across the top of the world. They were cruelly deceived and they landed without food, utterly exhausted, and soul-sick on as barren a shore as they had found on any of their utterly desolate islands.

Melville's party began without hope to ascend one of the many strenuous crossings of the delta. As it turned out the gale had providentially dumped them on the shore within struggling distance of the only village within one hundred and fifty miles.

Cape Barkin, where De Long had landed according to his plan and Dr. Petermann's information, was hopelessly removed from any habitation whatsoever. After they had moved inland as far as they could, two of the less dead of the party were sent ahead to seek help and were found nearly dead by some natives and nursed back to some semblance of health. De Long and the rest of his party perished.

Melville's successful search for the bodies of his Captain's party is a story in itself and a study in fortitude and perseverance which would be remarkable even if it had been accomplished by a healthy man. As it is it is nothing short of astounding.

Of the original party of 33, eleven survived.

**Civilizations**

In looking around for something else to worry about, something I would deem worthy of my talent for worrying, the perfectly obvious fact that the world seems to be in one hell of a fix appears to offer the requisite scope and produce the maximum number of nights' sleep lost.

It is quite true that the world has been in these fixes before, at least what portion of the globe constituted the world at the time of the various troubles to those people involved. Might it not be possible to find out what happened at those times and also why?

I may say here that I got lost and in very deep water very soon after I started. So much so that I was sorry the whole thing had come up and I was tempted to drop it and look for something more simple and immediate with which to deepen my gloom and my ulcer. I did not do so for no particular reason that I can think of, but as you will presently see, I suppose I should have.

Of the twenty-six civilizations which have adorned this Earth since the beginning of time, no less than sixteen are now dead and buried. The ten survivors are our own Western Society, the main body of Orthodox Christendom in the Near East and its offshoot in Russia, the Islamic Society, the Hindu Society, the Far Eastern Society in China and Japan, and the three arrested civilizations; the Eskimos, the Polynesians, and the Nomads. Of these, eight are dead or nearly so or under threat of assimilation by Western Civilization, the tenth or Eskimo was arrested in its infancy and is standing still. Toynbee appears to feel that at present, we are undergoing our 'time of troubles' which has always been the first visible stage of breakdown in those civilizations now dead or dying. He does not say so explicitly but he obviously seems to feel it.

As to the causes of the downfall of these, historians of previous years have felt that either of two main causes were operative.

The first is the so-called 'Cosmic Senescence' or cyclic theory by which all things that appear must eventually die by the very nature of things. Man lives and dies; day dies and is born again; the seasonal birth and death of vegetation and so forth; that the children of decadence have by nature suffered a paralysis of their natural faculties; that their children suffer a further impairment . . . and so on. Toynbee states that such a view is entirely untenable in the light of present knowledge. He cites many authorities in support of this and refutes such arguments in favor, such as the apparent rejuvenation of a society by the infusion of new blood. Cyclic variation do appear, but Toynbee likens them to a shuttle moving backward and forward across a loom. The monotonous recurrence is not beginning and ends but are to be viewed as productive of a larger and more complex pattern in the cloth being woven.

The second theory is 'Loss of command over the environment', (1) the physical and (2) the human. In degraded civilizations one sees many evidences of loss of the artistry and engineering ability which had once marked that society in its happier days. The idea might occur that here lies the answer at least in part to the question 'why?'. Here again the answer is 'no'. The abandonment of the Roman roads in Western Europe is a case in point. They’re going to ruin was evidence of the breakdown of the Roman Empire itself and not a loss of technical skills by the people of that empire. The abandonment of the elaborate irrigation system in the Tigris-Euphrates basin was due not to a loss of technical skills but due to the extreme insecurity of the peoples of Iraq and the impossibility of expending money and energy needed for the more immediate danger - the Roman-Persian War beginning in 603 A.D. and lasting twenty-five years.

Other examples, are the Indic irrigation system collapse in Ceylon and the story of the Pontine Marshes in Italy.

Loss of Command over the human environment has likewise been considered one of the prime reasons for the destruction of societies. However, the degree of command over the human environment possessed by any given society at any given time could be roughly measured in terms of geographical expansion. It is also true that geographical expansion is frequently accomplished by social disintegration. It therefore seems unlikely that the thing works both ways.

Edward Gibbon in his Decline and Fall of the Roman Empire gives the classic exposition of this view. He states, “I have described the triumph of barbarism and religion. The Hellenic society embodied in a Roman Empire which was at its zenith in the Age of Antonines, is represented as having been overthrown by a simultaneous assault from two alien enemies attacking on two different fronts. The North European Barbarians issuing out of the no-man's-land beyond the Danube and the Rhine, and the Christian Church emerging from the subjugated but never assimilated Oriental provinces."

Toynbee states that Gibbon, far from chronicling the decline of the Roman Empire, had actually started near the end of that period instead of at the beginning as he thought. Indeed, in a consideration of the Hellenic Civilization, with which Gibbon in the broad sense is concerned, the Roman Empire itself was a monumental symptom of its decay. Other civilizations as the Tumeric and Syriac were also long gone in decay before they were struck down finally by this loss of control over the human environment. This is comparable to the pneumonia which kills its victim after he is weakened by illness or senescence. To further clinch his case, Toynbee cites instances in which decadent societies have gotten a temporary stimulus - sometimes repeatedly - by such assaults, particularly by the Egyptiac society which it appears was actually kept going for two thousand years by such periodic explosions of energy provided by alien enemies.

How then does decay set in and from what direction does it come? Here we may say that there are two stages of this process - namely breakdown and disintegration - the process being suicide.

The cause of breakdown is failure of self-determination and this failure has many facets:

Constant growth is necessary to ward off decay and this growth is the work of creative personalities and creative minorities. This talent, however, is not the full story. for the few cannot go forward unless the non-creative majority move with them. This must be achieved by virtue of the innate imitativeness of man as nemesis. Cajolery, force or any means other than an honest stimulation of this property of the human animal will not suffice and must lead to failure. The leader's task is to make his fellows his followers - he cannot transfigure them but he must set them in motion toward a goal beyond themselves. In a way, they are mechanized and in step with the leader. His hold on them is tenuous, however, and is easily lost. He must constantly stimulate this faculty of nemesis. This human machine remains the servant of the creative minority only so long as this fragile relationship exists. In this relationship, the chores are done by the majority while the minority are left free for creative work. It is necessary for this minority to change the direction of this nemesis from retrospect (as ancestor worship) to prospect with all its uncertainties and lack of foundation. Hence it must constantly be given something to feed upon or it looks elsewhere for satisfaction.

Unfortunately, it is possible for the leaders to infect themselves with the hypnosis which they have induced in their followers. They then cease to lead and one of two things happens: the rank and file lie down to rest and work no more as in the arrested civilizations; or the rank and file consider that the leaders have abused their positions and proceed to thrown them out, whereat a state of anarchy is produced.

This basically is a loss of harmony within the society. This loss of harmony is paid for by the society as a whole by a loss of self-determination which is the criterion of breakdown. Growth is the progress toward self-determination.

Disharmony may also ensue following the introduction of new social forces which the existing set of institutions was not designed to carry. Ideally, the introduction of new dynamic forces should be accomplished by a reconstruction of the whole existing set of institutions and in a growing society, readjustments, at least regarding the more flagrant anachronisms, are constantly going on. This progress, however, is not achieved without a struggle against the natural inertia of so unwieldy a thing as a large group of human beings.

Sometimes the impact of a new social force on established institutions causes immediate explosions but is more apt to create disharmonies of a more subtle kind which unless re-adjustment is made in time, result also in catastrophes. One must be reconciled to adjustment, revolution, or the persistence of enormities which eventually are violently eliminated (civil war).

One such enormity in our own country, as cited by Toynbee, was the institution of slavery. This, he feels, would have died out and the adjustment made peaceably but for the impact of the Industrial Revolution in England which opened a vast market for cotton - the produce of slavery - and hence gave new life to a dying institution thus prolonging this particular enormity until it became so intolerable it was destroyed violently.

Toynbee fills many pages with instances of new forces at play on old institutions, but the above illustrates the most dramatic type of conflict, if not the most important. One other very interesting instance of this effect is that of civilization on nemesis. Toynbee says that by this means, the natural primitive man is transmogrified into a shoddy man-in-the-street, Hound Vulgaris Northciffis. It begets the enormity of a pseudo-sophisticated urban crowd, signally inferior in many respects to its primitive ancestors.

That creativity can work its own destruction - be its own nemesis - is demonstrated in several ways, one being idealization of an ephemeral self. It appears uncommon for the creative responses to two or more successive challenges in the history of a civilization to be achieved by one and the same entity. Indeed, an entity which has dealt successfully with one challenge is apt to fail miserably in dealing with the next. This, Toynbee calls the reversal of roles. This theme is one of the dominant motifs in Attic tragedy:

* He who stands on tiptoe does not stand firm.
* He who takes the longest strides does not walk the fastest.
* He who boasts of what he will do succeeds in nothing.
* He who is proud of his work achieves nothing that endures.

The successful creator is under a small handicap in dealing with a second crisis. Also, the number of creators available are diminished by each new crisis. Of equal importance is the fact that the creators who deal successfully with a challenge are usually in the driver's seat when the next challenge comes along. Therefore, the challenge is dealt with feebly and in a great many cases, new leaders who might deal with the situation are thwarted by those in power or at least get no chance to show their wares. Toynbee feels that this is one of the more potent causes of breakdown. The once-successful creator rests on his oars and if it is true that 'men may rise on stepping stones of their dead selves to higher things' then this man treats that one dead self as a pedestal instead of a stepping stone and, worshipping himself, becomes barren of resource and, losing touch with present reality, becomes impotent.

Toynbee gives as an example (one of many and not important, but close to home) the case of South Carolina, North Carolina, and Virginia prior to the War Between the States. South Carolina and Virginia were far and away the most vital and alive of the Southern states. North Carolina was drab and undistinguished. Since the war, South Carolina has probably been the slowest to recover with Virginia not far ahead, while North Carolina has been bursting both economically and intellectually. This reversal of roles typifies the state of suspended animation which accompanies the Idolization of an Ephemeral Self.

Idolization of an Ephemeral Institution likewise is fatally stultifying.

In the Hellenic Society, City State Sovereignty was the institution which was idolized and for this reason could not be enlarged to embrace a broader allegiance and collapsed when this became necessary coincident with the material expansion of Hellenic life. Theirs was at first a maritime world confined to the coasts of the Mediterranean basin. When this world expanded overland from the Dardanelles to India and to the Danube and Rhine, this provincialism was so niggardly in scope that it was no longer a practicable unit of political life. A more cosmopolitan attitude was imperative. It seemed that the challenge might be successfully met but so slow was the progress toward it that the knock-out blows by Rome came first and so good-bye to Athens.

Other Ephemeral Institutions that have been idolized and proven to be poison, fast or slow, are Kings, parliaments and bureaucracies. One must not stand in awe of once successful institutions lest he stand still and be run over. Another Nemesis of Creativity is the Idolization of an Ephemeral Technique. The key to this cause of failure is in the fact that the better one's techniques are adapted to a given situation, the more inadequate one becomes when that situation is altered. The inevitability of this is nowhere more dramatically illustrated than in the process of biological evolution.

In this regard, the disappearance from the Earth of the great reptiles of the Mesozoic age is a most striking example. These beasts of mammoth proportions were the lords of the earth and before whom no other creature could stand. They were so perfectly suited to their environment that life became easy and living was almost automatic. Through the ages they grew to even larger physical size while their brain - for which they had no need so simple was existence for them -did not develop proportionately. When the world became colder as it did finally, they sank into long hibernation and became extinct so rapidly that one wonders if some plague had wiped them out instead of the usual slow processes of evolutionary weeding. And what manner of creature inherited the earth - none other than the lowly mammal who were 'obscure little beasts of the size of mice and rats', to quote H.G. Wells. Surely none more meek was there on the face of the earth. This Nemesis of Creativity is also seen in any activity where there is competition from any quarter and competition of any kind.

In addition to the passive or 'resting on the oars' method of succumbing to the Nemesis of Creativity, there is the method that is described in three Greek words which I can't pronounce but which mean respectively, surfeit, outrageous behavior, and disaster. The first indicates the state of being spoilt by success, the second means the consequent loss of mental and moral balance, and the third indicates the blind, headstrong, ungovernable impulse which sweeps an unbalanced soul into attempting the impossible. The story of Goliath happens to illustrate the effect of both the Idolization of an Ephemeral Technique and the active aberration of conduct which is the present subject. This giant continued the once invincible technique of the individual champion without due regard for the possibility of improved techniques in the opposition. In addition, he went out of his way to look for trouble and the poor unfortunate bastard drew the one opponent in all the army of Israel who could let him have it where it would hurt the most. Sic Semper Tyrannis. What a vast clatter there must have been when all that hardware came tumbling down. If I seem to enjoy the tragedy of Goliath, I assure you it is only because I enjoy it. Truly, 'Pride goeth before destruction.'

The extinction of the Assyrian State, on the other hand, represents the pure active aberration at work. This community which had been in existence for over two thousand years and had been playing an ever more dominant part in Southwestern Asia for a period of some 250 years was blotted out almost completely. So rapid was the dissolution that historians can find but little information as to the last days of Assyria.

In the days of her glory, the loss and misery which Assyria inflicted upon her neighbors is incalculable, but in the end she herself was destroyed while her erstwhile conquests struggled back to life and strength. Only Nineveh fell dead and never rose again. Damascus, Samaria, Babylon, Sidon, Memphis, Thebes, and Susa rose from the ashes.

The failure of Assyria lay in the sinful, outrageous behavior and disaster in the military sphere. There was no Idolization of an Ephemeral Techniques, her armies were constantly overhauled, renovated, and reinforced down to the day of her destruction. She simply over-reached herself and there was no internal strength left, the military drained it all away. There was no moral strength at home and when the armies failed, the whole society fell to pieces.

Toynbee speaks of this as the Suicidalness of Militarism and further illustrates it in the exploits of Timur (Tamerlane). His proper role was the protection of the sedentary Iranic Society against the Eurasian Nomad Hordes, and for the first nineteen years of his reign, he performed this function well. At the completion of a particularly good job in the liberation of certain parts of his land held by these enemies, he stood at the zenith of the reputable part of his life. At this time, he had within his grasp the great Eurasian Empire left by Genghis Khan. Instead of availing himself of this great opportunity, he turned his arms toward the interior of the Iranic world and for the last twenty-five years of his life launched a series of barren and destructive campaigns in this quarter. His empire not only did not survive him, but was devoid of all after efforts of a positive kind.

One of the more general forms in which the tragedy of surfeit, outrageous behavior, and disaster presents itself is the intoxication of victory and this means of course, victory in any field.

It is in these ways that the downfall of civilizations is begun. As Toynbee states, breakdown begins far in advance of actual disintegration and collapse. It is felt by many that he sees the outset of breakdown before there actually is any. This is explained by the fact that Toynbee considers that breakdown is coincident with the cessation of growth in a society. He does not use the term in the sense that most of us use it. His disintegration is synonymous with our interpretation of breakdown.

I've gone about as far as I can with this thing. Disintegration of Societies may constitute a paper for some future date but it is too much for me to tackle now. There is considerable room for questioning whether or not I have already bitten off more than I can chew. I would be very inclined to say yes.

As you will have noticed in this rather drab abstract of a most wonderfully interesting part of Toynbee's book, the similarity of the weaknesses of societies to those of individuals is striking. One wonders if this is because like societies are the people, or if the societies themselves develop personalities and are consequently heir to all the ills and vanities of man. I wish this latter were so, at least for our society for, as is sometimes the case, an individual may lift himself by his bootstraps so to speak or turn away from the path he has been treading without resorting, as do nations, to caucuses, committee meetings, Leagues of Nations, popular votes, plebiscites, two chickens in every pot, and the inevitably slow and cumbersome processes of democracy, the need for which indicates disharmony.

Yet we say that there must be a two-party system. It appears that our democracy (and consequently our Western Civilization) has in its hand the dagger or the slow poison with which it will one day commit suicide.

This system, so far as I can tell, requires that such be the case and the fact that so many have a voice in the general bedlam and a hand on the dagger might well delay the disintegration indefinitely. Therein lies the virtue and the vice in a democracy. There are so many differences of opinions and disharmonies that we will not travel very fast toward either Heaven or Hell but will hang somewhere in between for a long time. I am sorry to say that whatever motion takes place will be in the direction of Hell, for democracy by its very nature violates the principle of the Rule of the Creative Minority and makes every man a king. Few will dispute the statement that in this country now there are far too many chiefs and very few if any Indians. At least, however, it will not be in the power of one man or small group of men to ruin us. There will not be a Tiglath-pileser or a Tamerlane.

We therefore have the best of all possible governments but it cannot endure forever. If Toynbee puts his finger correctly on the causes of the breakdown of civilizations, then we have almost the lot of them. If we avoid the pit for a long time, the virtue lies in our brakes and not in our pilots.

**Exorcism**

Recently a book and then a movie with the title, The Exorcist caused a great deal of excitement and revulsion in readers and movie-goers. I did not read the book or see the movie, so this writing is not about the merits or otherwise of either or for that matter of William P. Blatty, the author.

How widespread interest in the matter of possession by the devil and of the exorcism of this evil possessor there was prior to these events I do not know, but both book and movie were highly successful commercially and this indicates at least some latent interest in a great many people . . . or was it curiosity?

Exorcism has been an integral part of the Catholic Baptismal service since about 250 A.D. This particular use of it does not mean that the church considers candidates for baptism as victims of demoniacal persuasion but considers exorcism as a means to remove impediments to grace resulting from the effects of original sin. Analogously, inanimate things such as water, salt, and oil to be used in divine service receive an exorcism before being blessed or consecrated.

The exorcism of persons possessed by demons is carefully regulated by the Canon Law of the Roman Catholic Church and must have authorization by the bishop to the cleric involved and this man must be noted for his piety, prudence, and moral integrity. A thorough investigation must be made to determine whether or not he is dealing with a genuine case of possession. Just how he goes about this I have not been able to find out. I have read that a well-authenticated case of the exorcism of a possessed person occurred in Earling, Iowa in 1928. Here, too, there is was no explanation of how this authentication was done and no criteria for authentication were given. I had considered consulting a Catholic priest but I felt that he would consider my request frivolous and would be offended thereby.

An exorcist in the Roman Catholic Church is in the third grade in the minor orders of the clergy. The office is no more than a preliminary stage of the priesthood. The earlier record of the special ordination of exorcists is the seventh Canon of the Council of Cartage, A.D. 398. I believe that exorcism is also recognized in the Church of England.

In April of this year (1974) a letter from a Dr. Burkle of York, Pennsylvania, to the editor of the Journal of the American Medical Association stated that excitement over the book by Mr. Blatty derived from the actual case of a boy in the files of Georgetown University. Dr. Burkle remarked on the similarity of cases of a condition in medical literature known as Gilles de la Tourette syndrome. The television program, To Tell the Truth several months ago, had as a guest the priest who was technical advisor on the movie. He stated that the case of a child in Pennsylvania in 1948 was the model for the story. This is quite probably the case mentioned by Dr. Burkle. There is no mention of the medical diagnosis there in Dr. Burkle's letters.

Part of the symptomology was described by Itard in 1825 and by Beard in 1880. Complete account, however, was not described until de la Tourette did so in 1885.

Basically, the condition is characterized by motor incoordination and echolalia, spasmodic jumping, skipping, and flailings of the extremities and especially uncontrollable audible and visual coprolalia, the sine qua non in the diagnosis.

At some stage, usually early in the disease, the patient voices inarticulate cries such as grunting, rasping, croaking, and barking which give way later to coprolalia. Intervals between episodes become shorter and the behavior becomes almost constant. In most cases, especially in those originally reported, a gradual deterioration of the mental state occurs with eventual commitment to a mental institution. So far as I can tell, the more recent writers report fewer such cases and as mentioned above one writer estimates that only about 20% go on to this state.

Both sexes are affected, but predominantly males. The onset is usually before the age of 10 years, but may occur later.

The movements may consist of mild facial twitchings or of severe violent jerkings of the head, eyes, arms, legs and body. With these are explosive vocal exclamations of meaningless, persistent repetition of filthy words or profanities. Words having to do with sexual or excretory acts are often used for lengthy periods. Imitative gestures may be associated with the words. All these are absent during sleep and in patient writings.

The etiology of the condition is not known as is usual in such dilemmas. Multiple factors are suspected. There is often a history of domineering parent. Verbal expressions indicate hostile feelings toward authoritative figures and sometimes toward the patient himself. Occasionally, the movements appear to be brought on by strong emotional stimuli or sudden noises. Organic brain disease has been suspected but has never been proved. Since these people fall into the hands of the psychiatrists, one would expect psychiatric theories, especially the domineering parent ploy which as we all know is a favorite one. Whether a parent was by nature domineering, he or she might well become so in trying to deal with a child who spouts foul language gratuitously on any and all occasions.

These patients cannot concentrate, are easily distracted, and tend to withdraw from social intercourse or, as is also probably the case, are ostracized.

The duration of the condition is variable. Symptoms may occur at intervals and may persist throughout life. One reported case was of a woman who died at the age of 85 still pouring out the grossest obscenities. About 20% of recorded cases have become frankly psychotic. Some that have been reported are very superior in intellect - one with an IQ of 155 was at last record working toward the Ph.D. in nuclear physics. The lowest IQ in the cases I have been able to find was 90. Of course, there remain the psychotic 20%.

EEG in those tested has not shown any significant changes. One investigator reported an abnormality of the proportion of certain brain cells which he felt indicated impaired or arrested maturation of a certain part of the brain. This has not been substantiated by others and is not considered significant. Actually, there has been no detectable brain pathology found.

Treatment until recently, consisted of psychotherapy, 70% CO2 inhalations and shock therapy - both electrical and chemical - with very equivocal results. Benefit from these has been disappointing but may represent some improvement as the earliest writers on the subject pronounced the prognosis "sinister". It is still that, but it may be changing. Within the last five years the outlook has been somewhat better owing to the use of a drug known as Haloperidol or R-1625. This drug is closely related to chlorpromazine which is one of the tranquilizers. This latter medication has been used and is considered of no value, but a change in the chemical formula has given rise to R-1625 which seems to be promising, though follow-up is too short to allow of a conclusion regarding the matter. It is not without danger, however, some patients showing impairment of liver function that demanded discontinuation of the drug.

1. Male, 11 years, 8 months. Onset at 8 years of age. He was beaten severely by his alcoholic and sexually abnormal father. The patient exhibited the usual coprolalia. He had threatened his sisters, 4 and 8 years of age, with stabbing. He was smaller than average, and thin with a sad expression and generally pathetic demeanor. He was born out of wedlock but his parents married later. The father believed that the maternal grandmother had "put a curse on the boy". There is no record of this patient being exorcised. I may say here that the patient or possessed, as well as the Devil, are spoken of as being "exorcised". I did not know that the word was used in the former case.

2. Male 17. Symptoms began at the age of 7 with pulling of his penis. First coprolalia began shortly after when, during a long story recited by his father, he had the uncontrollable urge to say "shit" repetitively. His father beat him severely. Coprolalia continued, and between the words he would make guttural sounds. He became so disruptive of the school routine that he was expelled from the sixth grade and was taken to a mental institution where, during a pentothal interview, he made seductive gestures to the female interviewer. Treatment was of no benefit. When in the presence of females, his coprolalia was worse. He was taken to another institution. Memory, intellect, and judgment were intact and his physical condition showed no abnormality. His behavior worsened and in addition to coprolalia and spasms, he made sexual advances to both men and women. Treatment was of no avail and when lobotomy was suggested to the parents they refused and took him to a state institution. No further follow-up is recorded.

3. Muscular tics began at the age of 5. He would thrust out his arms and then touch the ground twice. He would stick out his tongue and make guttural noises, all the while flailing about with his arms. The vocal noises did not turn into coprolalia until four years after, following an obscure febrile illness, and became worse after the death of his mother. He was brought to the psychiatrist, giving this story, when he was eleven years old with the full-blown picture of this disease. He spoke freely of his past life. He was fond of his mother but considered his father as very oppressive and brutal. He disliked his teachers and school routine. His EEG suggested past infectious encephalopathy and his psychiatric exam was considered to indicate deep conflict with the father occupying a dominant role in the causation. Family cooperation was poor and grew worse. He was lost to follow-up.

4. Male, 12 years of age, brought because of compulsive movements, animal noises, and repetitive expression of stereotype phrases since the age of four. During this time, he was maintaining an average of 90 in school and was said to be popular with the other children. He was small and somewhat timid and did not fight. His IQ at this time was 127. His father was a successful attorney who had similar symptoms as a child, but all symptoms except eye-blinking had disappeared at the age of 14 and did not return. True coprolalia is not recorded in this case but repetitive cries of "sic 'em, sic 'em" followed by barking noises was frequent, as was repetition of "for Christ's sake, Amen", over and over. He had a multitude of tics involving all parts of the body, and marked compulsive behavior. He continued to do well in school until the age of 18, at about which time he complained of being confused and became more and more preoccupied with his trouble. He sank rapidly from the upper 10% of his class to the lowest third. He too was lost to follow-up and subsequent developments were not known.

5. Male, 11 1/2. Referred for shaking his head and "hollering out" since the age of six. Coprolalia began at age nine and had persisted. The coprolalia was partially suppressed when in public but the patient would frequently run out into a field nearby and stand, emitting a stream of curses and foul language for hours at a time. He had only positive thoughts regarding his parents. His IQ was 115 and he did well in school but later was forced to withdraw because of his behavior. His parents took him to a prominent mid-West clinic where the diagnosis of Tic de Gilles de la Tourette was confirmed. Further information regarding this patient was not available.

6. Male, 12 1/2. Referred because of bodily tics and barking and other animal noises. Began at age 8. Did well in school with IQ of 120. Here, too, true coprolalia was not described. Treatment was unavailing and he was lost sight of early in spite of strenuous efforts and could not be found.

7. Male, 12, was brought to psychiatrist by his mother because of "silly talk." Symptoms began at age 8 with tics and masturbatory movements accompanied by the repetitive expression "my jiggy joe stinks" and "oh put your feet in your mouth you fart face." He did poorly in school and was beaten by his father for his foul talk. His IQ was 91. He was observed for 2 years during which time treatment was unavailing. When last seen his condition was unchanged.

8. Male, age 11, brought because of tics and coprolalia which had begun at the age of 6. IQ of 142. This patient tried valiantly to suppress his outbursts, sometimes stuffing a towel in his mouth. A second IQ showed 155. He was attractive and creative and did exceptionally well at school. He got on well with other children but constantly fought with his brother. Tics remitted at age 11 and disappeared at age 12. Attended school with only occasional lost time because of coprolalia episodes. There were minor tics when under stress. He was interviewed at age twenty and showed only traces of tics. This is the patient who when last heard from was working toward his Doctorate in Theoretical Physics.

9. A man 35 years old with a history of multiple tics since age 10 - as many as 1,000 a day - and coprolalia, was "troublesome." R-1625 caused a reduction to 2 - 3 tics daily and without coprolalia. No follow up was given.

10. Male, age 16 with increasing symptoms since age seven. Facial tics, jerking of the arms, spitting, obscene gestures and shouts of "fuck!" approximately 3 times per minute. R-1625 was started in March 1963 with prompt and marked reduction in motor tics and coprolalia. Abnormal liver function tests forced discontinued use of the drug. No follow-up given.

11. Male, age 9, with history of facial tics, vocal outbursts and jerking movements of arms since age seven. He blurted out the word "Shit!" occasionally. Drug started in April 1963 and symptoms subsided in a week. He was able to tolerate the drug up to the time of the report. No further information available.

Most of the cases, all except the last three, were seen before Haloperidol was available and it appears obvious that treatment with this drug is effective. Unfortunately, as is frequently the case, the use of a potent drug is not without danger, the liver at least in some cases reacting to it in such a way as to make its use impossible. This type of reaction is probably rare but further use is necessary before it can be determined how rare.

De la Tourette searched the literature for cases of a similar nature in other cultures. In the Malays, there is found a condition which they call Latah. It is characterized by a severe startle reaction, automatic obedience, imitative behavior and echolalia. They follow verbal orders especially when they are given loudly or violently. They will do this to the extent of injuring themselves and will follow through a dangerous act only partially done by their tormentors such as putting their hands into a fire. They will automatically repeat words or phrases spoken to them regardless of their propriety. These actions are never spontaneous.

Myriachit is an identical syndrome found in Russia and is also known as "Arctic Hysteria."

The "Jumpers" of Maine also known as Shakers or Barkers members of a deviant Methodist sect. Church ceremonies reach a climax of religious ecstasy when the participants jump, shake, roll on the floor or crawl about on all fours all the while barking and emitting incoherent sounds (speaking in tongues). This behavior persisted outside of the church. These people were subject to jumping and twisting as in the two conditions mentioned above especially when startled and exhibited echolalia and echokinesis. A study of them was made by Beard in 1880 and he found that they dreaded being provoked into these actions as it was extremely exhausting but they were at the mercy of anyone who was inhuman enough to stimulate them to it.

It has been customary in medical literature to treat Tourette's Syndrome as identical with Latah and its related disorders but this is almost without question not the case. Those familiar with Latah have observed patients with Tourette's Syndrome and have said definitely that they were not the same.

A very disappointing thing about the modern literature on Tourette's Syndrome is the inability to follow the cases longer. None I found was followed beyond teen age except Case Eleven, which happened to be my superior mentally and who apparently was well on the way toward recovery at last account. He was not treated with Haloperidol and credit is given to Psychotherapy for his favorable progress - at least by the Psychiatrists who, it must be said, gave much of the credit to the parents of the boy.

The priest who worked on the film of The Exorcist had knowledge of another case of 'Possession' who was exorcised and was cured. This patient had reached full maturity and was without symptoms but had no recollection of his trouble. This is certainly not usual and is not mentioned in descriptions of Tourette's Syndrome.

Instances of Possession may manifest themselves in symptoms other than those similar or identical with Tourette's Syndrome. I do not know, but the case in question here exhibits a similarity that is impressive. At first glance 'Possession' appears to be a primitive concept much like witchcraft, but since no cause had been found for the medical syndrome, ground for argument is not firm.

Burkle says that the girl in the movie spoke in a previously unknown foreign tongue which is missing in Tourette's Syndrome but he also says, "However, how many cases have had degrading effects on concentration." He asks, "Could all of these patients be seized by the Devil?" No other explanation has appeared since Gilles de la Tourette wrote his description in 1885. The patients may feel some relief by saying "The Devil made me do it."