

IRON MEN OF HENDY



MAY
1943

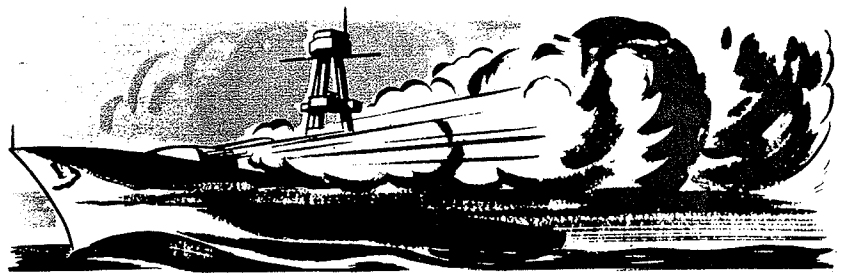


THE HYDRO-
LAST MAN

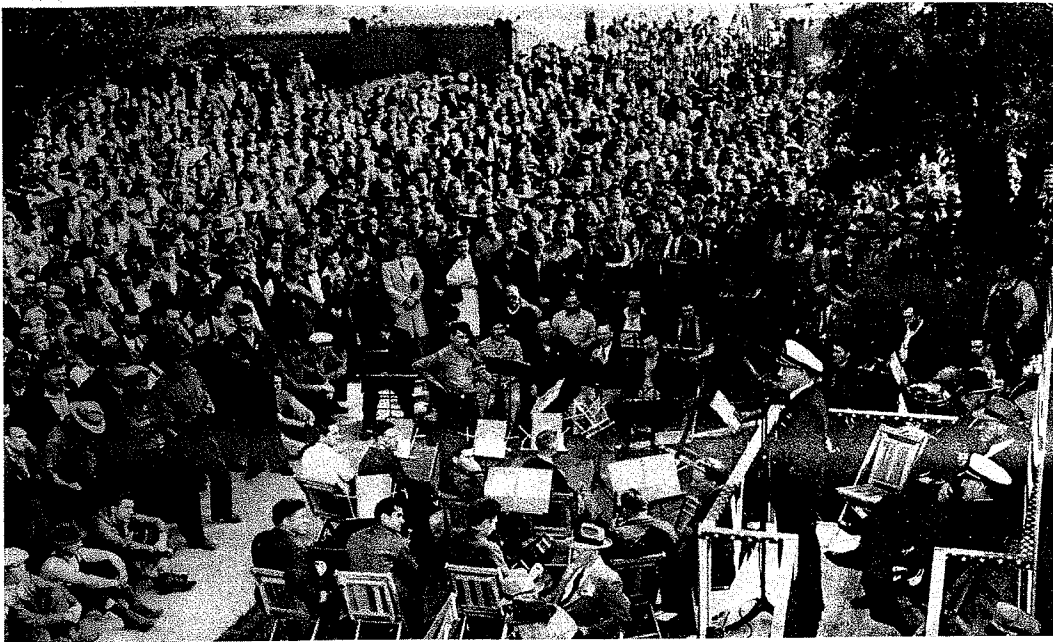
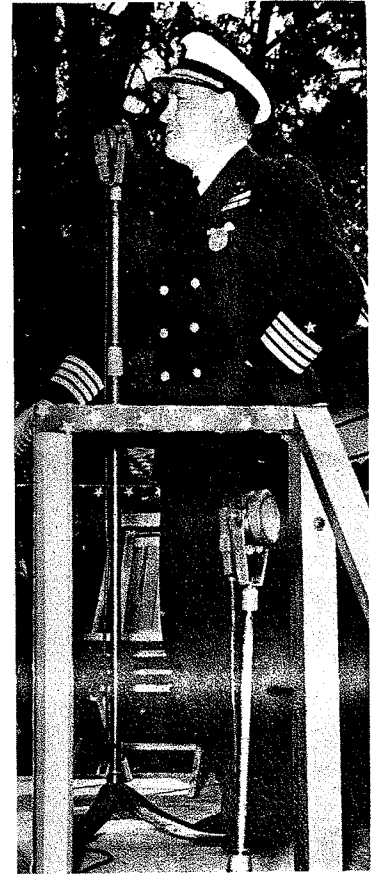
His Gun Fires
Billions of Bullets"

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IRON MIKE MEETS THE IRON MEN



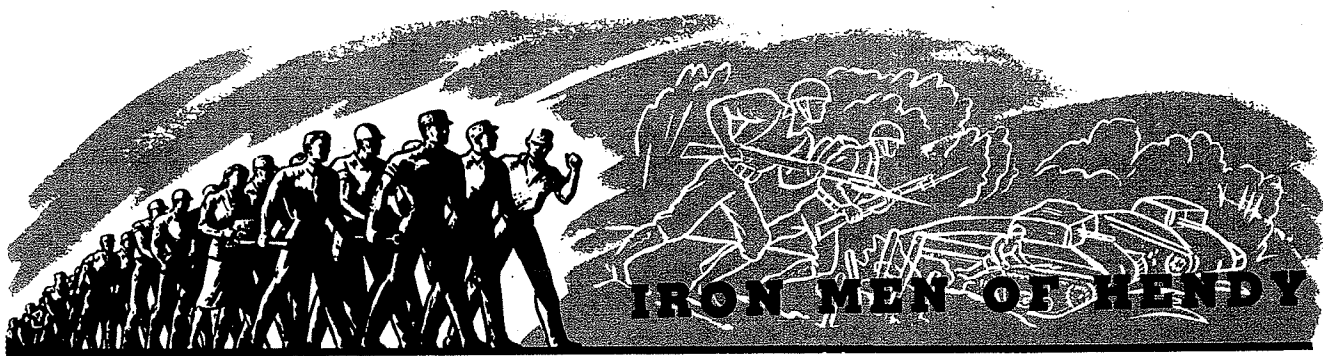
"There is nothing we can do out there in the Pacific unless you people do it back here first," said Capt. E. J. "Iron Mike" Moran, Jap-smashing Irishman, as he brought the war forcefully home to men and women of Hendy by showing how vital to American fighting forces are home-front production lines. Hendy-built torpedo tubes, he said, saved his cruiser "Boise" from being sunk after she had sent to the bottom six Jap ships, two larger than herself, in a flaming battle off Guadalcanal. An enthusiastic crowd applauded.



Recognition was given (lower left) to the sustained Hendy triumph over production schedules when Lt. Commander T. Southall (right) awarded Charles E. Moore a Merit-Star Army-Navy "E" flag for achievement of Navy Shop workers.

Old friends met unexpectedly at the rally (lower right) when Don McWhirter of the Engine Assembly tool room shook hands with Capt. Moran, his former superior officer on the USS Battleship Nevada. Don was in Communications Office.





"BUZZ—BUZZ—BUZZ"

The old familiar phrase, "A rolling stone gathers no moss," is a long way from true if you are referring to rumors. Plenty of times you've seen one grow in a few hours to five or ten times its original size, especially when it deals with pain or chaos. Let a rumor roll around in our shops (or anywhere else, for that matter) for a single minute, and it will gather more particles of assorted scrap in those 60 seconds than a high-power electric magnet would do in a metal junk pile.

Fortunately, no seriously distorted rumors have yet beset our people, but when Jim's loss of four teeth grows to a rumored "all his teeth knocked out" in a space of two hours—that shows what could happen. And we have other samples of actual rumors we have traced down which are equally exaggerated but far more serious in their effects on morale or personnel safety.

Don't forget that the spreading of rumors is a strictly Nazi device. Whether we engage in such practices intentionally or unintentionally, the final effect is the same. So, when you think a rumor is coming your way, don't be a magnet and automatically pick up the junk. "Leave it lay!"

Victory cannot be bought with any amount of money, however large; victory is achieved by the blood of soldiers, the sweat of working men and women, and the sacrifices of all people.

—FRANKLIN D. ROOSEVELT

TO THE EYES OF A STRANGER —

Suppose just for the fun of it that you knew nothing about the Hendy plant and were seeing it for the first time. The familiar shops would seem enormous and bewilderingly complex. The huge machinery, much of it unfamiliar, would excite your curiosity and perhaps take your breath away, while the simultaneous performance of many operations would fill you with awe.

You would be impressed by certain things—the surprising cleanliness of shops and equipment, the relative absence of noise, the lack of waste motion, the air of calm efficiency with which men and women do their tasks.

Almost every day, officials from the armed forces, government representatives, noted engineers, even "brass hats," make their first visits. Almost without exception—even when they have expected only a routine "walk-through"—they emerge dazed but enthusiastic, to become broadcasters of praise for Joshua Hendy methods. "I never dreamed it was like this," is the most-frequent comment.

The plant is familiar to you, of course, but don't let it become just a hum-drum mass of buildings and equipment. Try, once in a while, to see it with new eyes, to recapture some of the initial wonder, and to warm with pride at the efficient Hendy contributions to victory.

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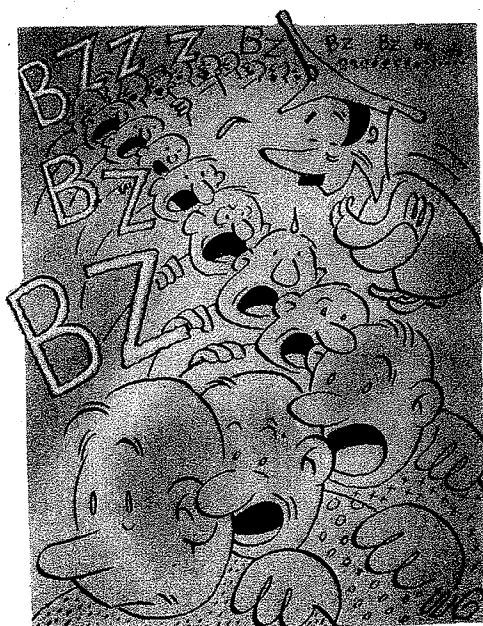
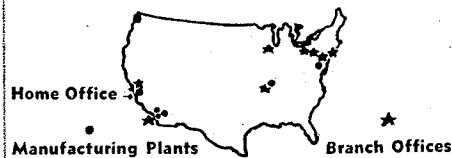
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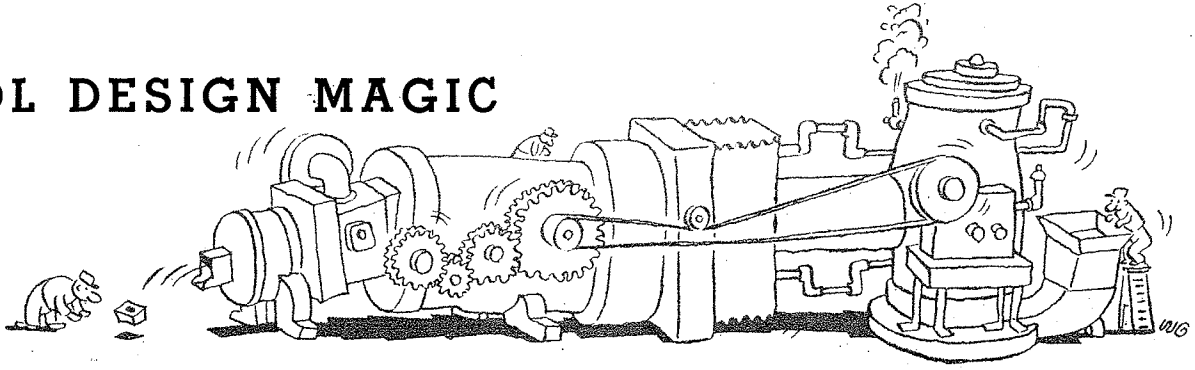
Pomona Pump Co.

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TOOL DESIGN MAGIC



Did you ever see a magician pull a rabbit out of a hat that wasn't there? That, in effect, is an every-day feat for George D. Bowman, chief tool engineer, and his ingenious staff of tool designers. Similar marvels are performed for the Turbine Shop by Dave Williams, with his assistants, and for the Navy Shop by Vince Nahm and his boys.

If a tool needed for a job isn't procurable, they make it. If it doesn't exist, they invent it. They even make machine tools to make machine tools, which puts them one up on the magician.

Not born until the EC-2 program was well under way, Tool Design now has a crew of 40, who constantly moan that they have more work than can possibly be done—but they always manage to do it. Some 125 are engaged in manufacturing tools, and 30 in servicing them. Navy and Turbine have their own forces.

"We've had triumphs and some dismal failures," Bowman admits modestly; but, confidentially, the triumphs far outnumber the failures. Bowman's job begins where the original designing ends, and sometimes the castings are already waiting to be tooled when the specifications get to him. Nor, even when the necessary tools are created, is the job finished, for he wages a constant battle to save hours and dollars by improving processes and methods.

A few months back a tool was needed to face mill the ends of engine columns. Our President, Charles E.

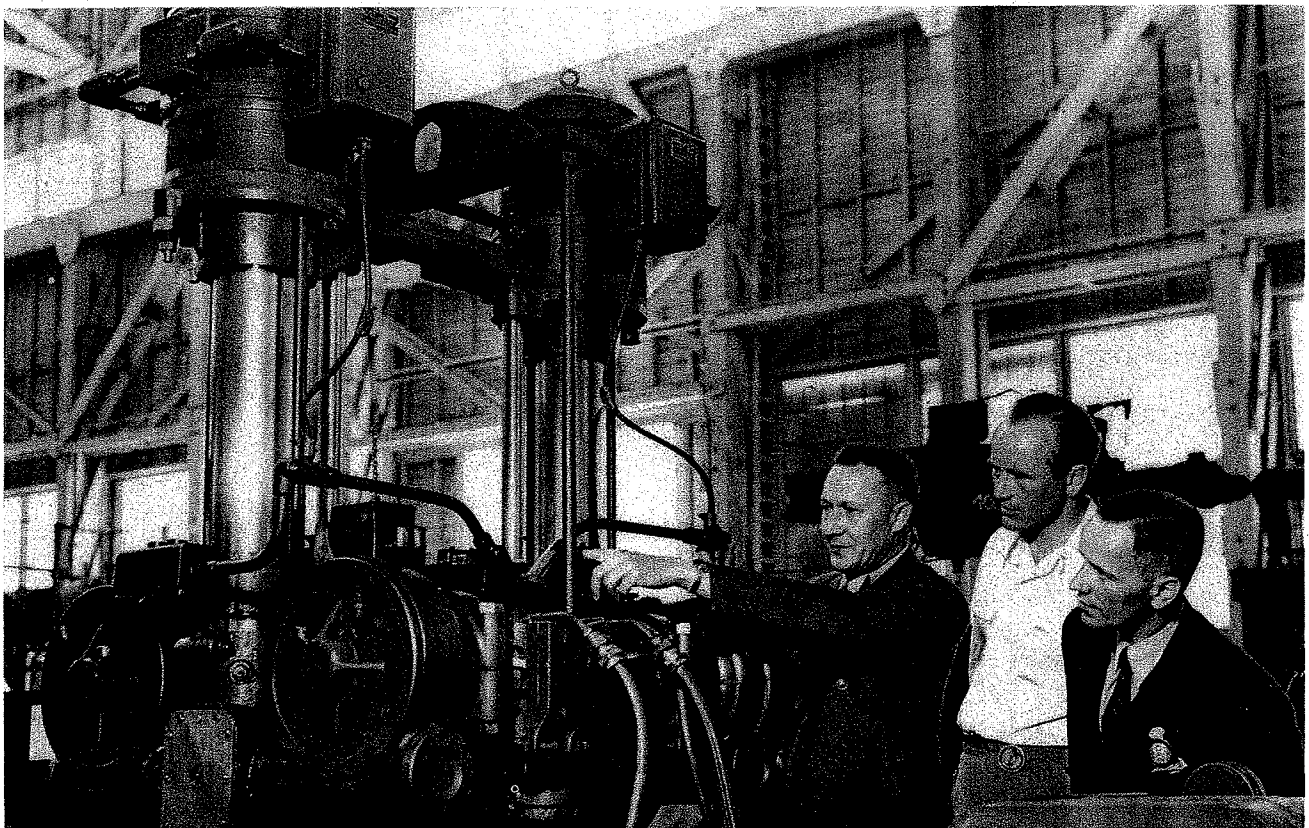
Moore, and Adolph Meyer, tool specialist, dreamed up a fantastic device, now affectionately dubbed "The Windmill." It is armed with 16 stellite blades and mounted on part of an old Liberty engine bed plate. Today it functions merrily releasing an expensive planer for other work, and doing $2\frac{2}{3}$ hours' work in just 17 minutes.

Another problem was to invent something to bore cross-head and crankshaft bearings for the EC-2. The exact machine was unprocurable. Tool Design stuck a hand in its invisible hat and came out with what were once an old lathe bed, the head of a defunct drill press, the transmission of an ancient Studebaker, and other fugitives from the scrap heap. But when it was all bolted together, it did the job efficiently, and continues to do it.

The standard machine which cuts keyways for eccentric sheaves on crankshafts takes eight to ten hours for the process. Tool Design said "Abracadabra!" and now the work is done in only $\frac{3}{5}$ of the former time by a portable fixture which clamps on the shaft, eliminating need for transportation of the part.

Another crankshaft job was monopolizing a \$75,000 machine. The Tool Design wand waved gently, and now a handy little fixture has taken over for the duration, freeing the giant for hours of vital performance in other fields.

That's the way George Bowman, Dave Williams, and





Vince Nahm, with their staffs of experts, work. Undaunted by precedent or lack of essential machines and materials, they keep pace with the rest of the Hendy plant in performing the impossible, even stepping out in front on occasions. At least fifteen radically new machines of major importance have been built under their direction, while improved modifications have been made in far more than 100 existing tools.

"Tool Design at Hendy's works a little differently from Tool Design in most places," says Bowman. "When a job or operation is to be toolled, manufacturing, tool room, and design discuss the problem thoroughly, each making its contribution to the final result."

We doff our hats to these boys who make tough production jobs easier with a new kind of hat trick.

Ingenious Straddle Milling Fixture (opposite page), designed and built in Hendy plant, is explained by George T. Bowman, Chief Tool Engineer, to Vincent Nahm, Navy Tool Chief (center), and Kurt Ritter of Turbine, who is carrying on for Dave Williams during his absence. Device mills bedplate cheeks.

Too busy even to pose for photographer, George Bowman's Tool Design crew (above) go about business while lens points. Under forced draft, they have produced many original machines for special jobs, adapted hundreds of standard machines, designed multitude of tools which save time, labor, expense.

With justifiable pride, Adolph Meyer (below), Tool Specialist, watches his "Windmill" bite into flange of engine-column end. Shopmen make fun of machine's appearance but have respect for its performance of job while releasing expensive planer for other work. It was built largely of scrap material.

