## The McBee Company Specimen Card - A Belated Answer Paul Mistretta (LM111)

I (finally) spotted a brief note by Bob Schwerdt (\#505L) in the April 2000 (p. 56) issue of the Bulletin which posed a question that appears to have gone unanswered to the present. I obviously wasn't paying very close attention when that note was published since I know most of the answers to the questions Bob asked (and found lots more information on the Internet). Reproduced below (Fig. 1) is a slightly edited version of the post card pictured in Bob's note.


Fig. 1. Post card from The Perfins Bulletin of April 2000 (p.56).

I think that the perforated "THE McBEE COMPANY//SPECIMEN" is actually a form of advertising with the 'specimen' referring to the card itself ('specimen' as in 'sample'). The additional row of holes at the bottom and left edges of the card are an example of a McBee Company product, cards known as McBee Keysort Cards. Predating computers, keysort cards were one form of product designed to allow the relatively painless manual isolation of information present only in a subset of the whole 'deck' of cards. I have seen examples of cards used by hospitals, libraries, businesses, and university professors. Many other users can easily be imagined.

These cards could be (and were) customized by the McBee printing facility to meet a customer's specialized needs.

To use the keysort cards you must design a code for the things you wish to sort. For a simple example, a
company might want to know all of its customers or suppliers located in New York state. So the user sets up a listing of states in alphabetic order and codes it from 1 to 50 ; maybe adding ' 51 ' for Washington DC, '52' for Puerto Rico, ' 53 ' for American Virgin Islands, etc. Separate cards for all of the companies with which business is done are created (by typing or writing information on the body of the card) to form a data deck. Each card then has the appropriate hole or holes punched for the state in which the business recorded on the card is located; this is done using a specially designed punch that creates a slot from the hole in the card through the edge of the card (Fig. 2).


Fig. 2. Punching a keysort card to code data. (Illustration from Anon. 1998 mod. 2007 in References)

Once a deck of cards is created as described, cards for businesses from a particular state's can be readily sorted from the others by pushing a tool that resembles a narrow knitting needle through the deck of cards at the appropriate hole(s). Shaking the deck will allow those cards punched with the desired state code to fall off the needle, while those which do not have the appropriate code hole(s) punched remain on it.

This process would require a lot of holes (50 or more) if one hole was coded for each state, but there is a way to cut down the number of holes required when coding data. Bob asked why the numbering 1 , $2,4,7$ is seen on the cards by the holes. The $1,2,4$ sequence makes sense to me, but the 7 has never done so. When I used these cards I coded the numeric value for the holes I was using as a 'binomial expansion' or $1,24,8,1631$, etc. (Thus
the ' 7 ' doesn't fit - but it obviously made sense to someone for some purpose.)

Continuing the state example, six holes (not $50+$ ) are all that you need to code up to 63 names. For the code numbers $1,2,4,8,16$, and 32 simply punch the appropriately numbered hole; that takes care of the 6 states in the list with those numbers. For all of the other states there is a unique combination of holes that represents its number in the sequence; for state \#3 punch both the 1 and 2 holes $(1+2=3)$; for \#15 punch the $1,2,4$, and 8 holes $(1+2+4+8=15)$; etc. In the example in Fig. 3 the punched holes represent state \# 20 - Maryland ( $[0 \times 1]+[0 \times 2]+$ $\left.[1 \times 4]+\left[\begin{array}{lll}0 \times 8\end{array}\right]+\left[\begin{array}{ll}1 \times 16\end{array}\right]+[0 \times 32]=20\right)$


Fig 3. Sample coding with a binary number series added to the card in Fig. 1 to give a 'state' field.

Most keysort cards had a single corner cut off on the diagonal so the 'deck' could be easily arranged with
all cards, and thus all sorting holes, properly oriented. Despite the similarity of many of the basic cards to computer punch cards (which could be sorted by machine) I am unaware of any sorting machine designed to be used to sort these keysort cards. In my experience sorting was accomplished manually not mechanically.

For completeness in describing these cards I have also used them with two rows of holes around the card and have seen them with up to 4 rows of holes around the edges. And the cards themselves (in their heyday) were produced in a variety of shapes that included 3 " x 5 ", 4 " x 6 ", 5 " x 7 ", etc up to $81 / 2 " \times$ 11 " cards.

Should you be interested, lots more information can be readily accessed on the Internet by searching with the keywords "McBee keysort".

## References:

Anon. 1998 mod 2007. LSCHE - a "nearby history". http://www.pvc.maricopa.edu/~lsche/aboutLSCHE. htm. 4 p. (accessed 8/11/07).

