New battery of thirteen multiple magazine linotypes supplants fifteen which gave service for twenty-two years. New models do more and better work than fifteen formerly did.

## The Efficiency of the Linotype on The Bee

EFFICIENCY, the keynote of any manufacturing business, depends mainly upon two elements-perfect machinery and tools and ideal working conditions. The second, naturally, follows the induction of the first. Good light, air and fair treatment being taken for granted. The Bee recently modernized its plant, bringing it up to the highest point of efficiency, and in so doing laid the foundation solidly by the purchase of modern linotypes, the product of the Mergenthaler Linotype Co. of New York.

When The Bee was founded by Edward Rosewater in 1871 the linotype had not been invented. And had it been the little sheet could not have afforded one, and, indeed, would scarcely have needed one, as it consisted of but two pages, 12x18 inches in size.

Twenty-three years ago The Bee, as usual, leading the procession, installed its first linotype battery of twelve machines, and it has been setting its body matter on linotypes ever since.

As Omaha developed and the paper expanded new linotypes were added from time to time, and in 1906 the first two-magazine machine was installed.

This type of machine proved so satisfactory that last May The Bee installed a complete equipment of thirteen big multiple-magazine linotypes.

The first linotype had only one magazine. That is, only one size of type could be set on it. On each of the thirteen machines in use today, from four to six different kinds and sizes of type can be set. Movement of a lever by the operator changes the kind of type.

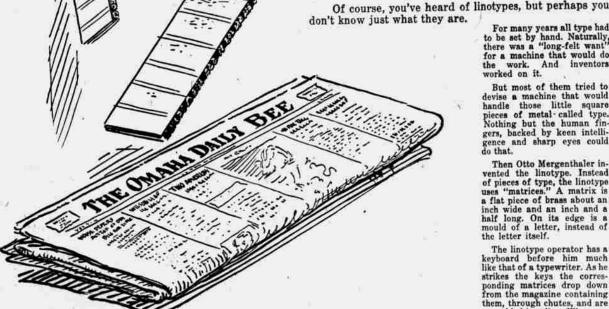
On one machine, called the "head-letter machine," the headings of articles are set. It will set type as large as 24-point, which is one-third of an inch in height.

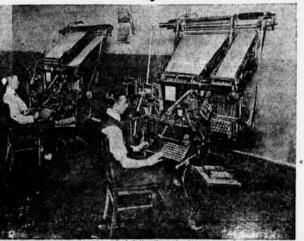
The efficiency of The Bee's composing room consists not only in the use of these won-derful machines, but in perfect lighting and ventilation. Because placed directly under a sky-light. The Bee's machines get ample light and air. At night the room is illuminated by electric lights of the indirect radiation.

There are no overhead wires. Lamps for each linotype are placed on adjustable brackets coming up from the floor. Each machine, moreover, is connected with an individual electric

The mechanical perfection of these machines is wonderful. Though running prac-tically all day and night, none of the linotypes has given the slightest trouble at any time.

The Bee has a battery of thirteen linotypes and claims it is the best and most efficient battery in the United States.





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The Model "14" in Action.

Song of the Linotype

(With spologies to Edgar Allen Poe.)

Hear the linotypes today, Every day, Preparing for the paper all the things men do or say. How they "click-ly, click-ly, click-ly" In the big composing room, While each matrix drops so quickly, And each slug is made so spick-ly With a molten metal "boom." Keeping time, time, In a linotype rhyme To the fascinating "click-ly boom" that sings its roundelay, From the lino, lino, Lino. type,

T HE linotype! Second in importance only to the invention of printing itself, is the invention of this machine which sets up most of the body type in the world today.

All the body type in The Bee is set up on linotypes. Also all the ordinary headlines and all the type in the ad-

vertisements, too, except that which is larger than 24-point,

Hear the linotypes today,

Li-no-type, From the smoothly-running, click-ly

Li-no-type.

(one-third of an inch).

For many years all type had to be set by hand. Naturally, there was a "long-felt want" for a machine that would do work. And inventors the worked on it.

room.

But most of them tried to devise a machine that would handle those little square pieces of metal called type. Nothing but the human fin-gers, backed by keen intelli-gence and sharp eyes could do that. do that.

Then Otto Mergenthaler invented the linotype. Instead of pieces of type, the linotype uses "matrices." A matrix is a flat piece of brass about an inch wide and an inch and a half long. On its edge is a mould of a letter, instead of the letter itself.

The linotype operator has a keyboard before him much like that of a typewriter. As he arrikes the keys the corres-ponding matrices drop down from the magazine containing them, through chutes, and are assembled in a line. When one

line has been set this is carried up to a little slit in front of the hot metal pot. There the hot metal is poured against the line of matrices and, presto, in an instant that line has been moulded all ready to print.

Then the matrices are carried away, and by an ingenious arrangement are automatically distributed back into their various magazine compartments, ready to be used again. In a minute after they came out they are back in the magazine again. And everything except the striking of the keys by the operator is automatic.

Before the linotype was invented the distribution of the type after it had been used was half of the work. This is done auto-matically by the linotype.

There is much of romance that attaches to the linotype. It is the almost-human machine which quickly and easily sets into type most of the material which the world reads today. The news is gathered from the remotest corners of the earth. It comes flashing across the cables under the ocean. It is hurled through the air on the wireless. It is flashed across the telegraph wires from all sections of this continent. It is telephoned in from surrounding towns and cities. It is sent in by rush mail. It is brought in by reporters.

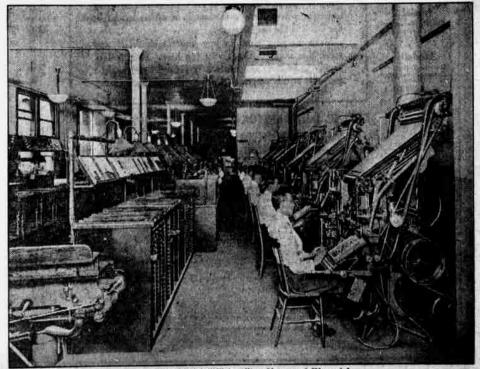
Then it is taken in hand by editors who cut out the unimportant, edit the "copy" and write heads for it.

Then comes the linotype, setting up all this news, quickly and neatly and efficiently, and distributing the type again while it is setting up more, as rapidly as a man can click the keys, doing every-thing automatically with aimost human intelligence.

"The flexibility of our battery of linotypes is such that we can handle any class of matter on which there is a specially big run at any time," says the superintendent of the composing

"Department store advertising, which formerly caused us to tremble and shiver, now does not mean any more than the ordinary run of business, as the three Model S's in the news battery, which we use for advertising in an emergency, in connection with our two 14's, make this copy disappear like a June snow after the sun rises.

"The model 4 on heads gives us a great variety of head faces, including two styles of 18-point, one of 10-point, one of 12-point and one of 24-point, which allows us to keep ahead of the game during the rush in making editions. And, last but not least, the seven model K's give us control of the news situation, no matter what happens. The plant must be seen to be appreciated, and we believe that their exposition in The Bee office is not equalled in any other composing room of the continent."



The Model "K" handling News and Want Ada

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