

retarded but for a fraction of a second, and then, without a further touching of the key, takes its proper place.

To the left of the operator is the distributor. Three columns of matter placed side by side and about a foot long are placed on a sort of shelf standing nearly perpendicular. The machine takes the first line, which is, in fact, three, and automatically distributes it. The shelf then moves up and the next line is distributed, and so on. It removes any type which may have been damaged by stereotyping or turned end for end by the hand compositor in correcting or otherwise, and drops it in a box provided for the purpose. It takes the spaces out of the line and distributes them in the proper case. The types are then built up one on another from the bottom. On top of the type in each channel is placed a piece of metal resembling a common slug, the thickness varying with the width of the channel. When any one of the channels of type reach up to a certain point in the case, the metal comes in contact with a bar which stops the distribution, thus preventing an overflow of the case. All this of course is done automatically. If the operator should be called away from the machine, it would not matter, as it takes care of itself.

The machine sets and distributes at the same time, and a type can be put in and one taken out during the same revolution of the machine, and although the last letter distributed is the first letter out there is no chance for conflict.

Here is the explanation of their method of justification: "While this has always been considered impossible of accomplishment its practicability will be clear to anyone, if considered from the mathematical side. Of course, to make any number of things the same length one must start with some length as a standard unit. This unit can be made whatever length the work to be done requires, as the width of any book page or newspaper column. With this length known, the problem is simply this: Take the length of any number of words which are to compose a line and subtract their sum from the unit or standard and the remainder will be the length, which is to be filled out by spaces to separate the words of the line." And this mathematical problem is automatically worked.

The machine runs very lightly, an ordinary sewing machine belt being used on the pulleys. The only machine now in running order is the result of twenty-two years' work. While there will be no change in the principle, the new machines will be different in some respects, some parts made lighter and others heavier, but the whole will weigh considerably less. It oils itself. It adjusts itself to any wear, and it is claimed that the machine can be run constantly for years.

Tables can be set with this machine much quicker than they can be corrected by hand.

It also automatically measures the number of lines set. It counts up to 9,999 lines, or about 270,000 ems, four or five days work. When a foreman doubts that an operator is doing the proper amount of composition he can easily satisfy himself by glancing occasionally at the register. As this is regulated automatically the operator is at the mercy of the machine, and any "soldiering" would be exposed as soon as attempted.

It is safe to assert that any fairly good operator with this machine will be able to produce 12,000 ems per hour. The company's prospectus states that any one can run the machine, and no observer of the working of the apparatus could doubt the statement. The operator need only know how to read and punctuate correctly.

A NEAT AND TIDY OFFICE

PRESIDENT PEASE, of the Minnesota Editors' and Publishers' Association spoke as follows at the recent convention:—

"If there is any hobby that I ride, it is cleanliness in a printing-office. Although a little expensive, it pays. There is no excuse for printing-offices being so dirty and uninviting. I have seen offices that were not fit for men to work in. Lawyers, doctors and the other professional people, business men, and firms keep their offices and stores clean and inviting; and why not newspaper offices? If you should happen to visit a nice, well-lighted, and well-kept office, and hear the comments made upon it by visitors and others calling there on business or a social visit, you would realize fully that not many offices reach a standard of neatness and cleanliness, and you would also learn that about everyone expects to find our offices dirty and disagreeable. Think of the many hours we have to spend in the offices. They ought to be next to our homes, the nicest and best places we possess.

"Whenever I find a neat and nicely-kept printing-office, then I invariably expect a well-printed newspaper to be issued therefrom. If every publisher boasted of such an office, a marked improvement in the typographical appearance of many of our papers would result. A fine power press is not necessary for a neatly-printed paper. There are some really handsome sheets issued from a Washington hand-press, but great care and watchfulness are required to keep them up."

MANY men have credit for wisdom when the quality they possess is nothing more than "cuteness," which has no regard for right and utterly ignores the thought of doing unto others as they would have them do to them.