

being wholly different from that utilized hitherto in such work.

It is much more rapid and efficient and before long will doubtless supersede the old plan, which is even now applied to the gumming of cigarette stamps for the internal revenue. The paste is applied to the cigarette stamp by hand with brushes. As fast as they are gummed they are laid sheet by sheet on slatted frames, which are piled in stacks.

The stacks are wheeled on trucks into a room where they are placed in front of electric fans, so that the cool air may dry them. Hot air would accomplish the purpose more quickly, but it would be hard on the workwomen. For this reason the slower process is adopted. The new method, to be applied to the postage stamps, will be an immense improvement in every way.

The machines for this purpose have just been set up. There are two of them, exactly alike, and one will do for description. Imagine a wooden box nearly 60 feet long, four feet high and three feet wide. From end to end runs what might be taken for the skeleton of a trough.

This skeleton projects from the box for a few feet at either extremity. The box is traversed by two endless chains, running side by side, two feet apart. Into one end the sheets of printed stamps are fed one by one. As it is fed into the machine each sheet passes under a roller, like the roller of a printing press, to which a gum made of dextrine is slowly supplied.

The sheet takes up a coat of this mucilage on its lower side and is carried on by the endless chain through the long box. This box is a hot-air box, being heated by steam pipes. At the other end of it the sheets are delivered at the rate of 18 a minute. Just one minute is required for a sheet to pass through the box, and it is delivered perfectly dry.

The gummed sheets thus delivered are passed over to a long table, where girls pick them up in pairs, and, placing the gummed sides together, put them between layers of straw boards. Arranged in this way they are placed under a steam press to flatten them, the mucilage having caused them to curl somewhat.

On coming out of the press they are counted again, and now they go to the perforating machine that make the pinholes by which it is rendered easy to tear the stamps apart.

The perforating machine is an arrangement of little wheels revolving parallel to each other and just far enough apart to make the perforations as one sees them in a sheet of finished stamps fresh bought at the post office. After the perforations have been made across the sheet one way by one machine the sheet must pass through a second machine for the cross perforations.

In the middle of each machine is a knife which cuts the sheet in two, so that the sheet of 400 comes out of the machine No. 1 in two sheets of 200 each, and these are divided into four sheets of 100 each by the second perforating machine.

The stamps are now done and only remain to be gone over, inspected, counted and tagged in packages of 100 sheets before being sent out. Each package of 100 sheets holds 10,000 stamps, of course.

But stay! There are one or two more preliminaries yet. After receiving the perforations the sheets of 100 are put under a press to remove the

"burrs" around the little holes, otherwise these would greatly increase the thickness of a package. Then they are counted and placed in steel-clad vaults, from which they are drawn as the post office department may want them.

The bureau of engraving has not yet begun to furnish stamps to the government, but is all ready to do so. In response to orders received from the post office department it will put the stamps up in packages, address them to postmasters who require them and deliver at the post office in Washington for mailing.

The post office department now has an agency at the bureau of engraving. When a postmaster wants stamps he makes out a requisition upon the department. The latter will communicate with its agent in the bureau, who will draw upon the bureau every day for as many stamps as he requires to fill the orders thus transmitted to him.

All this business used to be done in New York city, where the stamp agent received the stamps from the American Bank Note Company in bulk, his business being to put them up in packages and send them off by mail. The inks used for printing the stamps are manufactured at the bureau of printing and engraving. The materials are bought in the shape of dry colors and linseed oil.

The colors come in the shape of powders. The only stamps turned out thus far are the two-cent red and the one-cent blue. For the former carmine is used, and for the latter ultramarine. Both colors are "toned" by the admixture of other ingredients—the carmine with paris white and white lead. Pure carmine would be very costly.

Ultramarine is not very expensive but it is too "strong" in the printers' phrase—that is to say, too dark. It used to be the costliest of colors, being made from the precious lapis lazuli. But in recent years chemists, having analyzed the lapis lazuli, have produced in the laboratory a successful imitation of the color-stuff.

For making the ink the color powder is combined with linseed oil and ground between rollers. Each printer receives every morning his allowance of ink, and sharp account is kept of every bit used. Uncle Sam will save about \$50,000 a year by printing his own postage stamps.—*Washington Star*.

STRAY HUMOR.

Mrs. Upthecreek—Well, here is a letter from my son John!

Postmaster—Well, what do I want with that? I delivered it to you yesterday.

Mrs. Upthecreek—I know you did; but, don't you see, it says on the envelope, "return in five days to John Upthecreek, New York!" Though what in the world John wants me to return his letters for, I can't understand!

"And you really consider it good luck to find a horseshoe, then?"

"Certainly. They're worth two cents apiece at any junk dealer's, and every little helps these hard times."

Cape Elizabeth, Me., has a sensitive youth. He inquired at the post office "for-letters for his mother." "What is your mother's name?" asked the clerk. "None of your business," answered the boy. "Her name is on the letter and you ought to know without asking me."