

of steel in the vault. These weigh about fifty tons, and constitute the most valuable steel in existence.

#### HOW BANK NOTES ARE MADE.

These fifty thousand different pieces of steel represent the work of many lives. They are covered of the finest of engravings, and a peck of human eyes have been ruined in their production. There is no finer engraving in the world than on our bank notes, and there is none so ruinous to the eye-sight. The engravers work in little cubby holes under the windows, and there is a long room here filled with engravers. The entire face and back of a note is never engraved by the same man. One engraver makes the fancy letters on a bill. Another makes a specialty of portraits and another has some other particular part of the work which he can do better than any one else. He does his work on a piece of soft steel. When it is done it is hardened and is transferred to a soft steel roll about as big around as a schooner beer glass. This roll of steel is hardened and its impression is rolled off on the steel plate from which the note is to be printed. Every plate has on it the face or back of four notes, and it takes just as much trouble to engrave a one-dollar bill as it does a thousand-dollar bill. Engravers get from \$25 to \$100 a week, and the highest priced men are those who work on portraits. They make the engraving for revenue stamps and postal cards, as well as for bank notes, and their work has to be perfect in order to pass. Just now they are engraving a diploma to be given out to the exhibitors of the world's fair exposition at Chicago. This will cost thousands of dollars and is a wonderfully fine piece of beautiful workmanship.

#### PRINTING FOR THE NATIONAL BANKS.

The work being done on the national bank notes at the present time is more like ordinary printing than the fine work of the bureau. All national bank notes have their characters and seals put on by the surface process, and there are a dozen or more Hoe presses which are working away finishing the engraved notes for the national bank. The national bank note plates are all the same, but the bureau has had to make new plates for some of the banks, and the engravers and the plate printers have been turning out the original notes for this printing at lightning speed. The printing of the notes, with the exception of this surface printing, is all hand work. Inside a great steel fence surrounding a room covering about half an acre there are hundreds of hand presses, each of which is worked by a printer and his assistant. The printers are of all ages and their assistants are all women. I noticed that some of the women were colored, and not a few of them are as black as the ace of spades. The printers are paid so much and they have to hire their own assistants. They are not allowed to choose their assistants, but they have to take the women which the department gives them. The press has to be inked and wiped off for every impression, and the printers work away with their sleeves rolled up to their elbows and their arms covered with green ink.

The press which prints the greenbacks and other money looks like a four-armed windmill, and it consists of two metal

rollers between which there is a slab of iron running on four guide wheels. The printer first puts his plate on a small gas stove, rolls ink over its surface with a roller and then rubs the surplus of the ink off with his hand and rag. He polishes the plate with whiting until it shines like a mirror and takes all the ink off but that in the engraved line. He now places the plate on the press, the paper is put on it and by a hard pull of the windmill-like arms of the press the impression is made. This prints only part of a bill, and all bills have to go through the presses several times. As soon as the banknotes are finished they are taken to the drying room and left there over night. This room is heated by steam to 250 degrees above zero, and in the morning the sheets are thoroughly dry and as crisp as crackers. In the morning they are carefully examined for imperfections and the least fault in a sheet causes it to be thrown aside. If a smudge of ink has gotten upon it or if there is the slightest mistake in the printing it cannot be used, and the printer who caused the trouble has a certain amount deducted from his wages for every sheet so injured. The sheets are now polished by being put between mill boards and a pressure of 5,000 pounds to the square inch is placed upon them. They are then numbered by automatic machines, and are finally put up in packages of 1,000 notes each, with ten slips of paper between each 100 notes.

#### WOMEN WHO HANDLE FORTUNES.

The women who handle the money are the most expert counters in the world. Their fingers go like lightning. They do not move their lips nor lift their eyes, but they rattle off the bill at the rate of a hundred a minute. They have to be women of nerve, and if mistakes are made they are charged with them. After the notes are counted they are put into the iron van and carried over to the treasury. Whence they are now being shipped all over the country. At the treasury the notes are counted as soon as they are received. The sheets are cut up and the money is sent out in packages of a hundred notes each. Before starting it is safe to say that a greenback is counted thirty times after it has left the printer, and there is no possible chance for fraud or theft.

#### A MILLION DOLLAR POT OF MUSH.

Leaving the girls counting out these national bank notes and handling fortunes in an hour, I went down into the basement of this great money factory, and saw a pot of the costliest mush the world has ever known. Think of a pot of mush worth more than a million dollars. This is what I saw in the basement. It was steaming and seething in a great cylinder, and it was made of cut up greenbacks. All the money that comes back to the treasury is brought over to this place and cooked and ground and steamed until it turns from notes into a pulpy, pasty mixture for all the world like oat meal gruel. The cooking goes on every day, and from one to two million dollars are ground up every twenty-four hours. The money is cut in halves at the Treasury Department. It is hauled here in the great steel van, and it takes sixteen hundred pounds of it to fill the mush pot. It goes in dirty and filthy with the soiling of many hands. The chemicals and

steam takes all the dirt and filth out of it, and it comes out gray and pulpy. It is then molded into boards looking for all the world like hides of untanned leather and is sold to paper mills. Some of it is made into little images of the Washington Monument, caricatures of Mr. and Mrs. Cleveland, and these are sold for paper weights or souvenirs for sight-seers. Each souvenir is labeled with the amount of money which is supposed to have been made from the pulp from which it is constructed. But this, of course, is all guess work. The same amount of pulp could make a hundred thousand dollars worth of notes, or a thousand dollars worth of notes, according to the denomination, printed on the paper which it represented.

#### MONEY PROSPECTS.

Mr. Claude M. Johnson, the chief of this great bureau of engraving and printing, is a Kentuckian, but he has been connected with the bureau for some time. He is, I judge, about forty years of age, and is noted for his business talent and his executive ability. He has broad gauge ideas of the money question of this country and during my talk with him he said that he thought we would soon have more money than we would know what to do with. "The national banks," said he, "have greatly increased their circulation and the money which has been drawn out to be hoarded will be thrown back into the channels of trade as soon as confidence is restored. This will be within less than two months, and it is safe to say that within that time more than two hundred million dollars will come to the banks from that source alone. In the meantime the bureau of engraving and printing is ready to supply the country any amount that Congress and the treasury may authorize. All we want is the proper authority and we will do the work."

FRANK G. CARPENTER.

#### WAKEMAN'S WANDERINGS.

ECCLEFECHAN, SCOTLAND Sept. 14, 1893.—Some English tramps were singing for their breakfasts before the doors of the grave Scottish villagers of Ecclefechan when I tramped into the hamlet behind them. There were five of them, great, hulking fellows and their hoarse and aggressive bellowing was the only sound indicative of human life in the village, even at that late hour of the morning. They stood beside a melodious burn which dashed from under a covered way and coursed on through the village street.

At one side of the stream was an ancient wall. On the other were straggling houses, and the one before which the vagabonds lifted up their harrowing voices was one of the plainest and quaintest in Ecclefechan. From its appearance it might have been an olden stable; an abandoned lodge at the entrance to some gentleman's establishment formerly located behind it, or the ancient jail of the village, now smartly whitewashed and transformed into a lowly habitation. It was a mite of a thing with an archway through it occupying one-third of the lower story.

At each side was a narrow oaken door, and, nearer each end, a tiny window. In the second story another little window above each lower one looked into the street, and over the centre of