

SCIENTIFIC AMERICAN

A WEEKLY JOURNAL OF PRACTICAL INFORMATION, ART, SCIENCE, MECHANICS, CHEMISTRY, AND MANUFACTURES.

Vol. XXXVII.—No. 26.
[NEW SERIES.]

NEW YORK, DECEMBER 29, 1877.

[\$3.20 per Annum.
[POSTAGE PREPAID.]

A CURIOUS POCKETBOOK.

We illustrate an ingenious combination in which the frame of a pocketbook, a cigar case, and a revolver are united. The advantage of such a pocket article will be readily perceived, as it forms a convenient mode of carrying a revolver for protection, especially when attacked, as it can be fired at a highwayman when handing the pocketbook. The revolver is arranged at the interior, and is attached to the frame, being separated by a metallic partition from the folding pocketbook, which does not appear in the illustration, being on the other side. The trigger is made to swing downward for firing, and can be bent upward into a groove, secured by a catch when not in use. The opening in the side of the frame, shown in the engraving, is closed by a hinged cap, which is opened and shut by the action of the trigger.

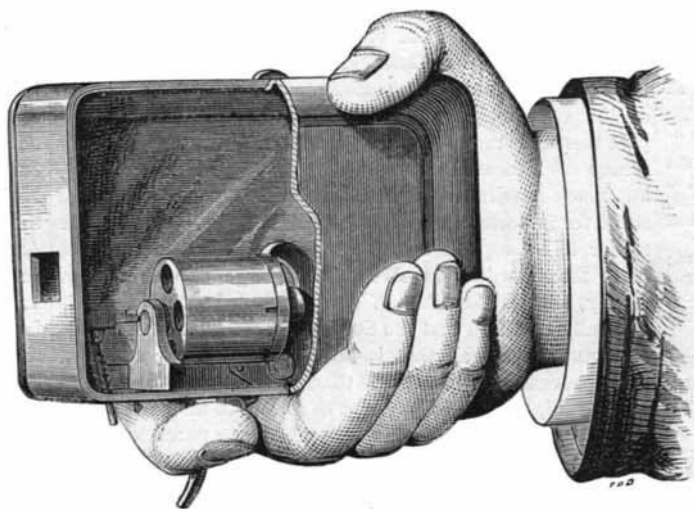
Patented November 6, 1877, through the Scientific American Patent Agency, by Oscar Frankman, of Nuremberg, Germany.

BRICK-MAKING MACHINE.

There are several distinct classes of machines in brick-making, which are respectively indicated by the character given to the clay before arriving at the stage of finished bricks. There are the dry and pulverized, the semi-dry, and the wet or plastic machines, each of which claims to have special advantages. Probably, however, the medium condition of the clay will give the most satisfaction in the after burning, and to secure this is the object of the machine of which we copy the illustration and description from *Iron*.

The clay is filled into wagons and hauled to the machine by a winding drum of the machine itself. The power (about 14 horse) is communicated from the engine flywheel to the pulley, of considerable diameter, upon the small

countershaft seen in the extreme left of the illustration. This countershaft will run as fast as 120 revolutions per minute, and is fitted with a small flywheel to steady its motion. The shaft is carried by one outside plummer block, and a plummer block and wall box in the wall. On the end of this



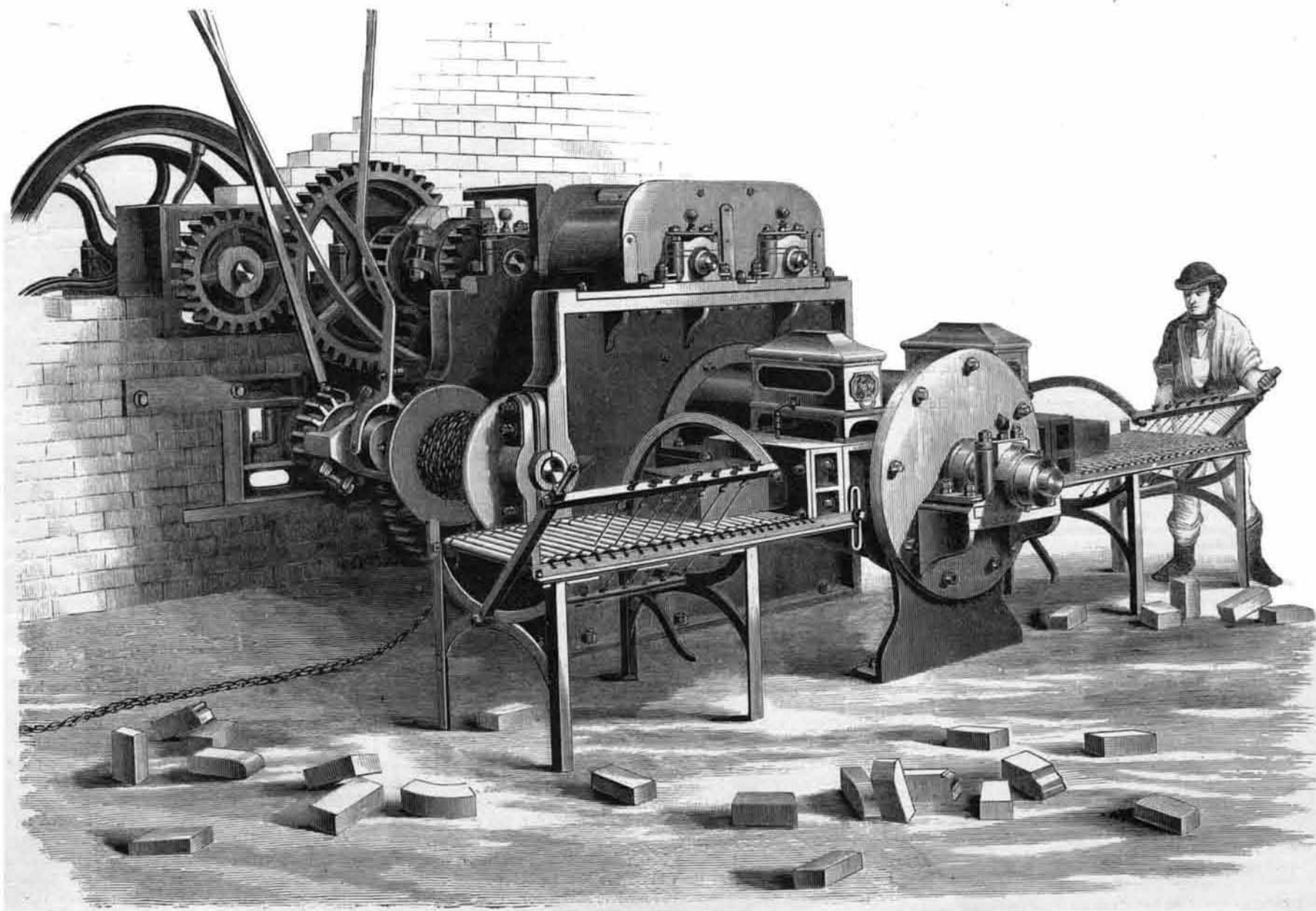
A CURIOUS POCKETBOOK.

first shaft is a strong cast iron pinion gearing into a cogwheel upon a second countershaft, which is carried at one end by a plummer block and wall box in the wall, and a bearing on the other end in the main frame of the machine. Upon this countershaft is a friction clutch, which connects another pinion to this shaft, and from this pinion the two crushing rollers are driven. This second countershaft also drives, by

a very massive flanged pinion, a large pitched and heavy cogwheel upon the pug shaft, which is a forging of Bessemer steel, and runs through the machine, pugging and working down the clay to the die chamber at the right. The clay is here forced from the two sets of dies on either side of the die box, where the continuous rectangular blocks are received upon roller tables. Across these tables the cutting knives, in a frame, oscillate on a hinge below, and are worked by hand in the usual way. Upon the die boxes are situated two lubricating closets containing water, whence a constant stream is conducted to the dies through small tubes.

The interior faces of the dies are composed of best hard gun metal plates, overlying one another. Sheets of felt at the back absorb the flowing lubricant, and by transferring it to the passing clay between the orifices of the plates keep the sliding surfaces perfectly smooth. A special mixture of metal, harder than steel, is used for the rollers. The hauling drum shaft is carried at one end in a plummer block fixed in the wall, and at the other in a bearing and strong cap against the side of the main framing. This drum shaft is driven by a pinion from the large cog wheel on the pug shaft, and is connected to the drum by a dog clutch or carrier. The pinion drives the carrier through a friction band. The hauling drum has the carrier clutch movable, sliding on a feather key, and fitted with a long shifting lever, projecting upwards to the loading platform. The hauling drum can thus be readily thrown in and out of gear, and at the same time a strap brake is fitted to the drum shaft with a long upright lever, to give command of the load or trucks in running back.

It is stated that 9,000 feet per minute, measured on the rim, is a safe rule for speeding circular saws.



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