

P. HERVIER.  
Machines for Making Tiles.

No. 156,793.

Patented Nov. 10, 1874.

Fig: 1.

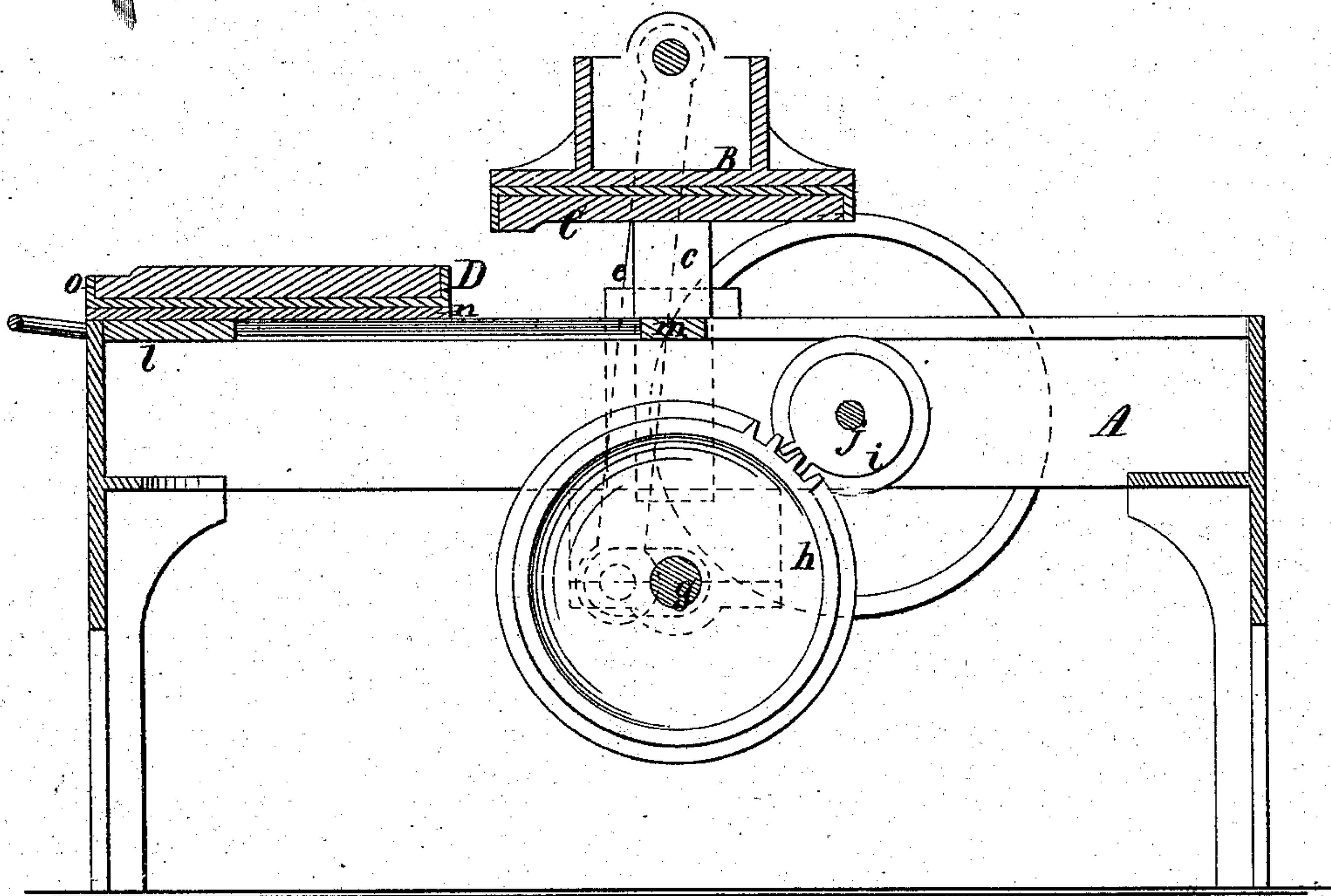
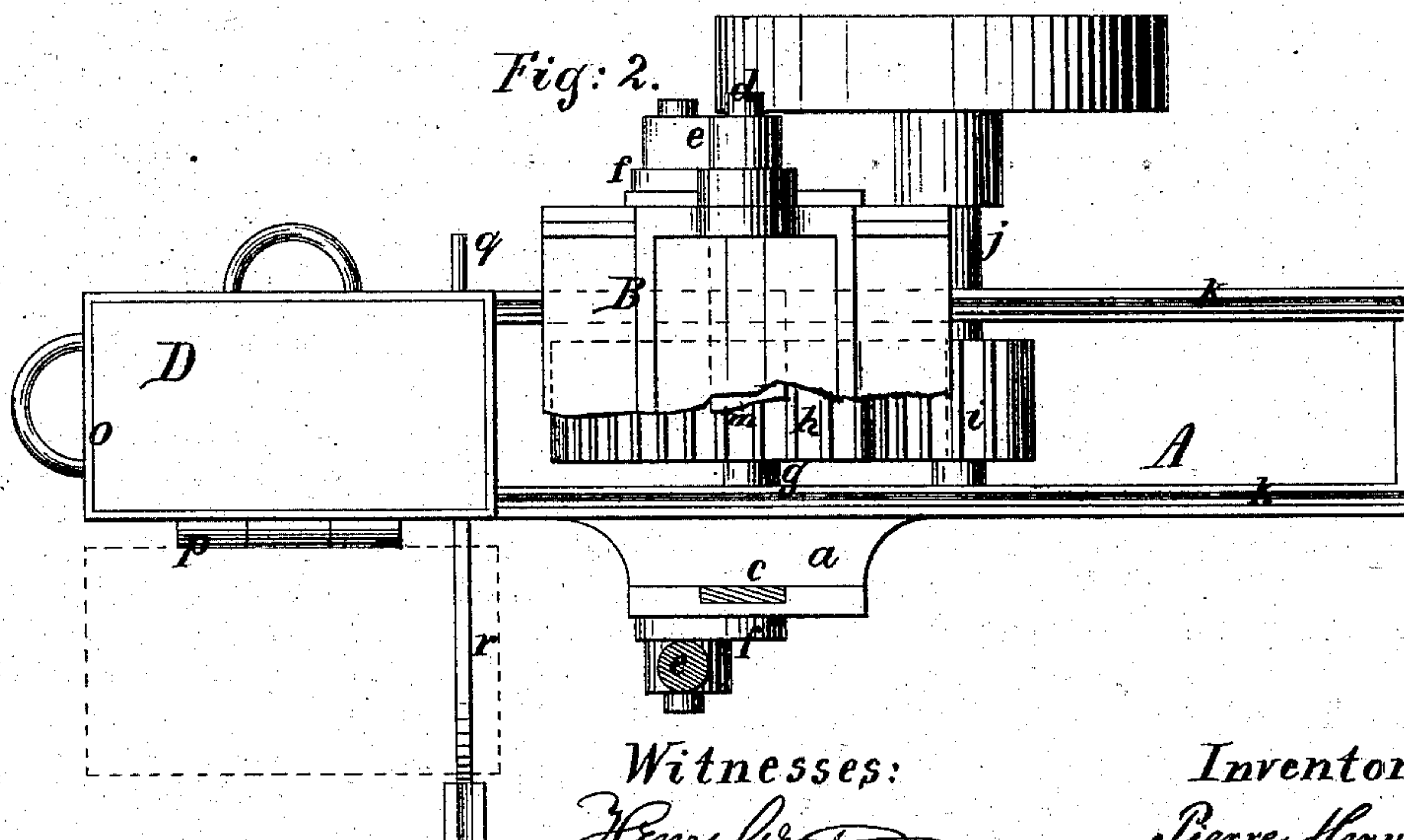


Fig: 2.



Witnesses:  
Henry Gentner  
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# UNITED STATES PATENT OFFICE.

PIERRE HERVIER, OF NEW YORK, N. Y.

## IMPROVEMENT IN MACHINES FOR MAKING TILES.

Specification forming part of Letters Patent No. **156,793**, dated November 10, 1874; application filed October 15, 1874.

*To all whom it may concern:*

Be it known that I, PIERRE HERVIER, of the city, county, and State of New York, have invented a certain new and useful Improvement in Machines for Making Tiles, of which the following is a specification:

This invention is illustrated in the accompanying drawing, in which Figure 1 represents a longitudinal vertical section. Fig. 2 is a plan or top view of the same, partly in section.

Similar letters indicate corresponding parts.

This invention consists in a mold which is made in two sections, which are connected by a hinge-joint, so that, by turning back the upper section, the tile formed in the mold can readily be discharged, an arm being provided which supports said upper section while the finished tile is removed. The faces of the die and of the mold are coated with plaster-paris, which absorbs the moisture from the clay and prevents the latter from adhering to the mold or die.

In the drawing, the letter A designates the bed of my machine, on the sides of which are secured boxes *a*, which form the guides for two slides, *c*. These slides support a head, B, to the under surface of which is secured the die C. From the sides of said head project gudgeons *d*, which connect, by means of pitman-rods *e*, with cranks *f*, mounted on the ends of a shaft, *g*, so that, by revolving this shaft, a rising-and-falling motion is imparted to the head and to the die. On the shaft *g* is mounted a cog-wheel, *h*, which gears in a pinion, *i*, mounted on the driving-shaft *j*, so that by turning this driving-shaft, the motion of the shaft *g* is reduced to the required speed. The bed A is provided with grooves *k*, which form the guideways for the mold D, and on the under side of this mold is secured a plate, *l*, the V-shaped edges of which engage with a corresponding flange on the bed, so that the mold is prevented from rising up or from dropping off. A suitable stop, *m*, which is fastened on the bed A, prevents the mold from being moved beyond the desired point, and if said mold is pushed in until it strikes said stop, it is in the correct position to meet the die. The faces of the die and of the mold are coated with a layer of plaster-paris, and thereby the clay from which the

tiles are formed, and which is compressed between the die and mold, is prevented from adhering to the same. If the metallic surfaces of the die and mold are brought in contact with the clay, the latter adheres, and it is necessary, in order to produce perfect work, that said metallic surfaces shall be coated with oil or other suitable liquid previous to each impression.

By applying a coat of plaster-paris to the die and to the mold, the use of oil or other suitable liquid can be dispensed with, and a large number of tiles can be produced without giving any attention to the die or mold.

The mold is made in two sections, *n o*, which are connected by a hinge-joint, *p*. The lower section, *n*, slides in the guideways of the bed, while the upper section, *o*, forms the mold proper. From this upper section extends a pin, *q*, and if the mold is drawn back to the end of the bed A, and the upper section is swung off from the lower section, said pin is received by an arm, *r*, which extends from the side of the bed.

In operating my machine, I spread the clay on the surface of the mold; then I move the mold under the die, and by depressing the die a tile is formed. The mold is then drawn back, and, by turning the upper section of the mold on the joint *p*, said tile is caused to drop off on a board or apron provided for its reception.

By means of my machine perfect tiles of any desired form or shape can be produced with great rapidity.

What I claim as new, and desire to secure by Letters Patent, is—

1. The mold of a machine for making tiles, provided with a coat of plaster-of-paris, to which the desired configuration is given, substantially as described.

2. The mold D, made in two sections, *n o*, connected by a hinge-joint, *p*, in combination with the pin *q* and arm *r*, substantially as shown and described.

In testimony that I claim the foregoing I have hereunto set my hand and seal this 1st day of October, 1874.

P. HERVIER. [L. S.]

Witnesses:

W. HAUFF,  
E. F. KASTENHUBER.