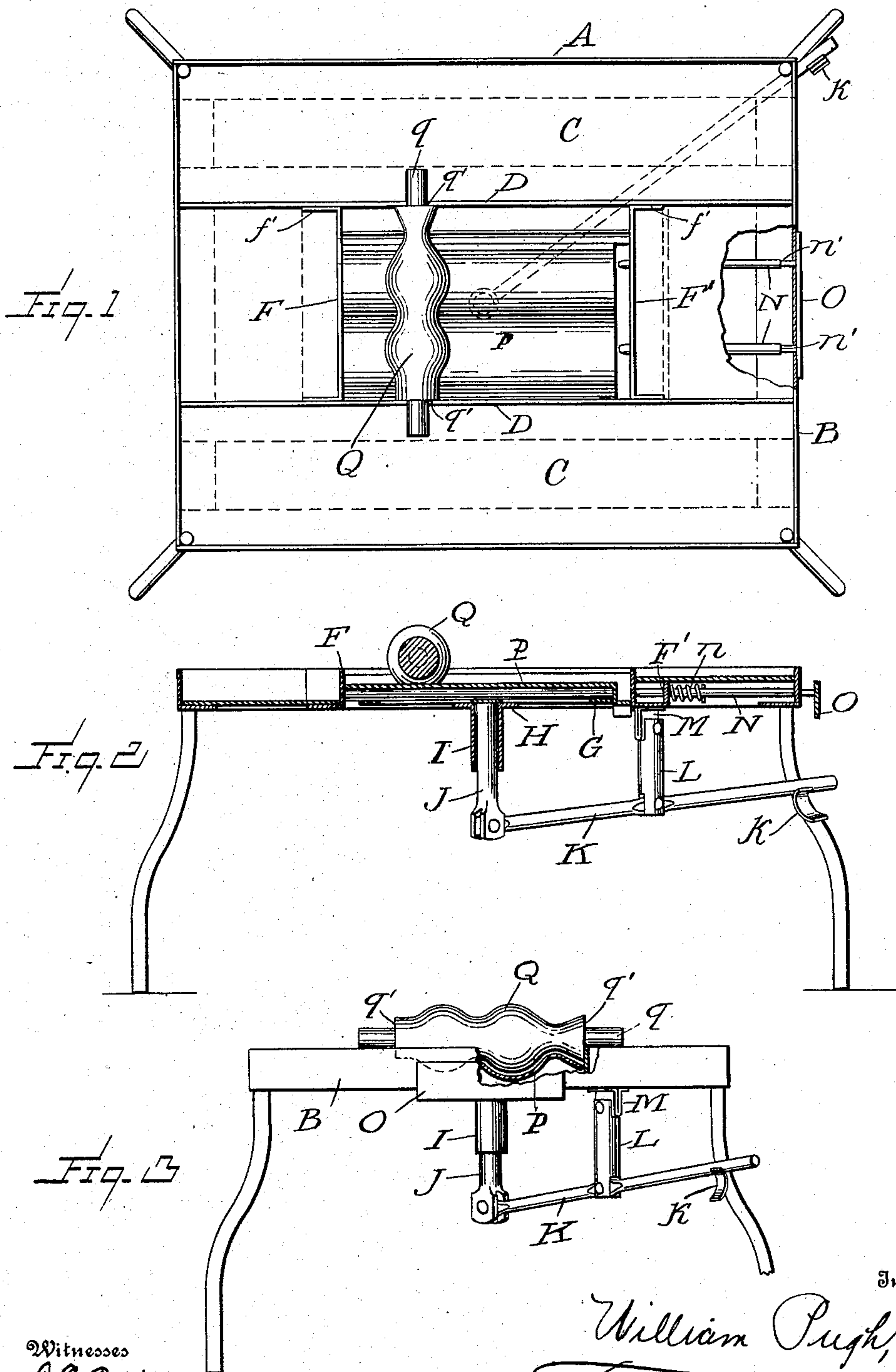


W. PUGH.
SHINGLE MOLDING MACHINE.
APPLICATION FILED MAR. 27, 1908.

900,778.

Patented Oct. 13, 1908.



Witnesses
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UNITED STATES PATENT OFFICE.

WILLIAM PUGH, OF STREATOR, ILLINOIS.

SHINGLE-MOLDING MACHINE.

No. 900,778.

Specification of Letters Patent.

Patented Oct. 13, 1908.

Application filed March 27, 1908. Serial No. 423,609.

To all whom it may concern:

Be it known that I, WILLIAM PUGH, a citizen of the United States of America, residing at Streator, in the county of Lasalle and State of Illinois, have invented certain new and useful Improvements in Shingle-Molding Machines, of which the following is a specification.

The molding machine forming the subject matter of this specification is designed primarily for molding shingles and sheathing, and it has for its object the provision of novel means for shaping the surface of the article (to be hereinafter termed "shingle", though it is to be understood that by the term is meant any tile, sheathing or like product) and for forming and puncturing a securing flange on said shingle.

A further object of this invention is to provide a die or pattern plate preferably with an undulating surface, and a roller having ribs and grooves in such relation to the surface of the pattern plate, that the grooves of the roller and ribs are above the grooves of the plate.

A still further object of the invention is to provide a pattern plate having novel means for molding a shingle and its integral flange; novel means also being provided for puncturing the flange to form holes for nails or other securing devices.

With the foregoing and other objects in view, the invention consists in the details of construction and in the arrangement and combination of parts to be hereinafter more fully set forth and claimed.

In describing the invention in detail, reference will be had to the accompanying drawings forming part of this specification wherein like characters denote corresponding parts in the several views, in which—

Figure 1, is a top plan view of the molding apparatus embodying the invention. Fig. 2, is a central longitudinal sectional view thereof. Fig. 3, illustrates an end elevation.

In these drawings, the frame of the table is shown as comprising the L-shaped side and end sills A and B, respectively, the horizontally disposed portions of the sills acting to support the plates C, forming the top of the table for containing the plastic material to be worked. The plates C, are supported along the inner edges by the sills D, which are likewise L-shaped; the upper edges of the said sills D, serving as tracks on which the roller E, travels. Transversely disposed

sills F, extend between the sills D, and are secured thereto in any well known manner; the said sills being here shown as having their ends bent at an angle, as shown at *f*, *f'*, and being in engagement with the sills D. The portion of the tables between the sills D and F, is open except for a frame G, which is supported on a sill H, extending transversely of the opening. A tubular guide I, extends from the sill H, and a rod J, is slidable therein; said rod having its upper end attached to the frame.

The rod J, has a lever K, pivoted to its lower end, and said lever is pivoted to a link L, having its upper end pivoted to a bracket M, depending from one of the sills. The lever K, has its inner end held normally elevated by the bracket *k*, on a lug of the tube.

The sill F is L-shape and the sill F', is preferably approximately U-shape. The two sides of the sill F', are perforated to receive and act as guides for the punches N, which punches extend through an end sill and are connected by a plate O, to be pushed by an operator. The punches may be provided with springs *n*, to hold said punches normally retracted, and outward movement of the punches is limited by the shoulder *n'*.

The frame G, is reciprocated between the sills D, D, F, and F', and said sills also form the walls of the mold. A pattern plate P, is applied to the frame G, and is of such dimension as to fit the space inclosed by the sills D, D, F, and F'. The plate P, is preferably corrugated, although the ornamental feature of the pattern plate may be varied to suit particular requirements. A roller Q, has trunnions *q*, which travel on the edges of the sills D, D, and the roller is guided by reason of the engagement of the shoulders *q'*, *q'* with the inner surfaces of the sills D, D. The roller is shaped to operate in conjunction with the surface of the pattern plate, and has peripheral grooves and ribs respectively, registering with the longitudinally disposed ribs and grooves of the pattern plate.

I claim:

1. In a molding machine a table having an opening in its top, a pattern plate in the opening having an offset portion to form a flange on the molded article, punches slidable longitudinally and adapted to penetrate the flange, and means for elevating the pattern plate.

2. In a molding machine, a frame comprising L-shape side and end sills, longitudinal

and transverse L-shaped and U-shaped sills respectively between the side and end sills forming an inclosure; a pattern plate supported in the inclosure, punches having bearing in the duplicate walls of said U-shaped sills or members and means for elevating the pattern plate.

3. In a molding machine, a frame comprising L-shape side and end sills, longitudinal and transverse L-shaped and U-shaped sills respectively between the side and end sills forming an inclosure; a pattern plate supported in the inclosure, punches having bearing in the duplicate walls of said U-shaped sills or members, a roller having trunnions movable on the intermediate longitudinal sills.

4. A molding machine comprising a pattern plate means for its support of frame-like outline embracing longitudinal and transverse L-shaped and V-shaped sills, and punch-members having bearings in the parallel walls of said U-shaped sills or members and having applied thereto springs to retain them in retracted initial position, said punch members having their outer ends yoked together by a common member.

In testimony whereof I affix my signature in the presence of two witnesses, this 25th day of March, 1908.

WILLIAM PUGH.

Witnesses:

LLOYD PAINTER,

JOHN B. PATTERSON.