

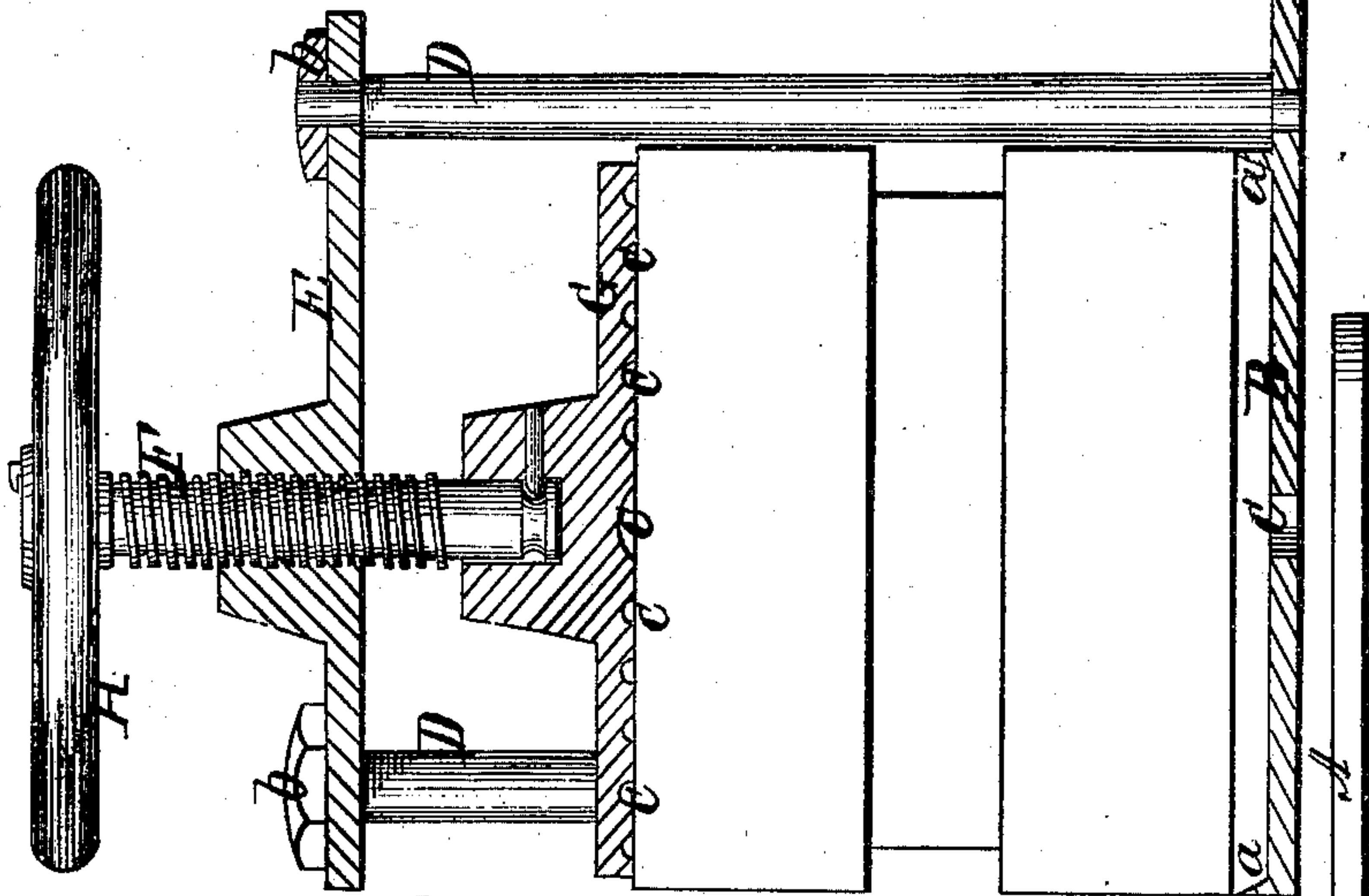
*D. W. Hunt.*

*Mach. for Cyanizing Wood.*

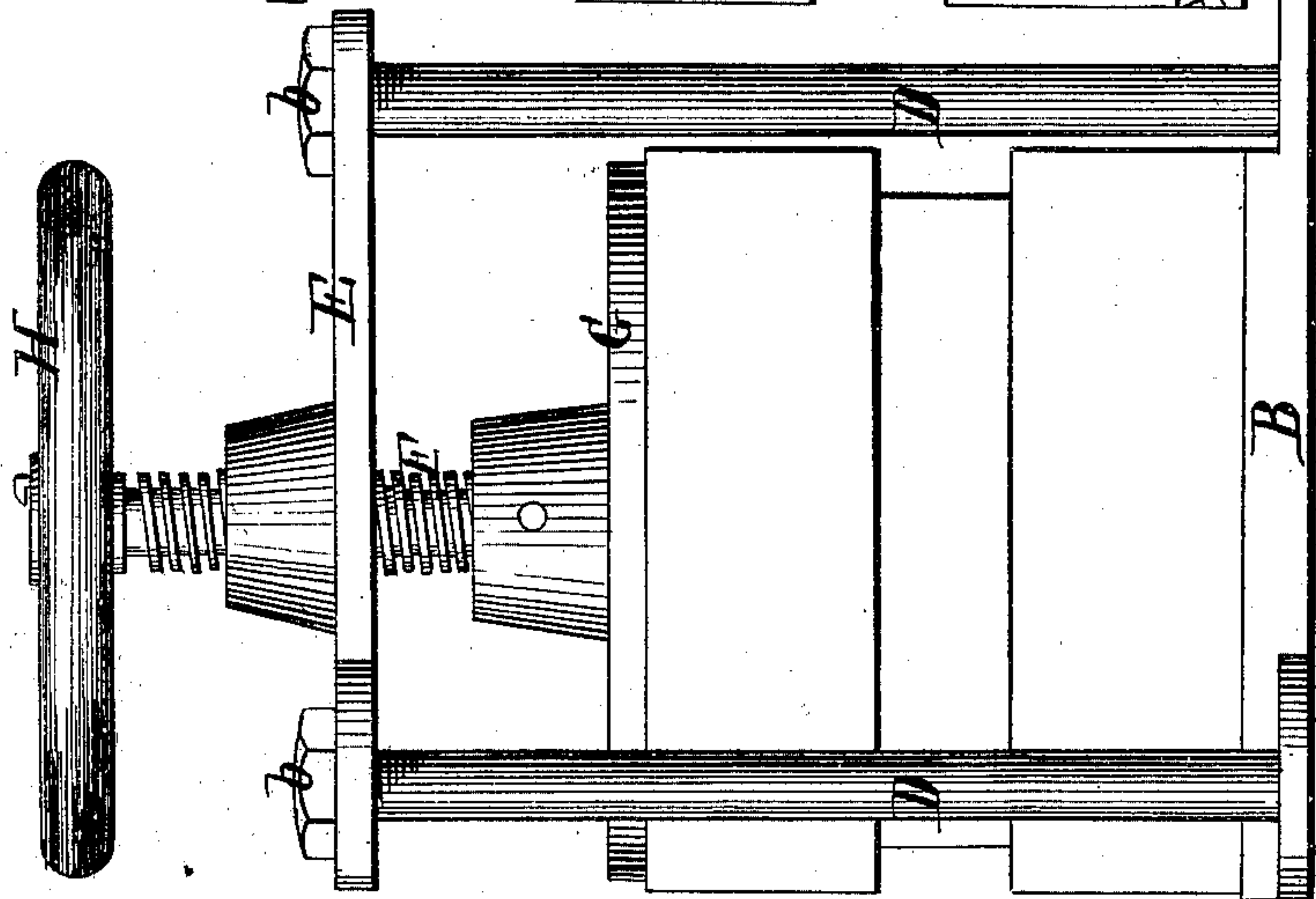
*N<sup>o</sup> 91,848.*

*Patented Jun. 29, 1869.*

*Fig: 2.*



*Fig: 1.*



*Witnesses;  
J. L. Brown  
Geo. H. Strong*

*Inventor;  
D. W. Hunt  
Drury & Co. Attys*



# United States Patent Office.

DAVID W. HUNT, OF SAN FRANCISCO, CALIFORNIA.

*Letters Patent No. 91,848, dated June 29, 1869; antedated June 22, 1869.*

## IMPROVED MACHINE FOR KYANIZING WOOD.

The Schedule referred to in these Letters Patent and making part of the same.

*To all whom it may concern:*

Be it known that I, DAVID W. HUNT, of the city and county of San Francisco, State of California, have invented an Improved Machine for Kyanizing Wood; and I do hereby declare the following description and accompanying drawings are sufficient to enable any person skilled in the art or science to which it most nearly appertains, to make and use my said invention or improvement, without further invention or experiment.

The nature of my invention is to provide an improved machine for retaining the wood in position while the substances or solution is being forced into it.

To do this I employ a bed-plate of iron, provided with suitable bolts for permanently anchoring it.

A square dish is made in the face of the plate, surrounded with a flange whose inner edges are bevelled.

An upper plate is placed above the lower plate, which is supported by three posts.

Passing through the top plate is a screw or cam-lever, having attached to it a corrugated cap.

The wood to be saturated is placed upon the flange on the bottom plate, and the screw turned down until the sharp edges of the flange, pressing into it, make it water-tight, and hold the stick firmly between the lower plate and cap, while the solution is forced in at the bottom of the lower or bed-plate.

In order to more fully illustrate and describe my invention, reference is had to the accompanying drawings, of which—

Figure 1 is a view of the frame with the block in place.

Figure 2 is a side sectional elevation.

A is the base or lower plate, constructed of iron, which may be provided with suitable holes or openings for anchoring the machine.

At one end of the bed-plate is a square dish, B, formed by a flange, *a a*, whose inner side is bevelled, so that a sharp edge is presented.

In the centre of the dish a hole or opening, C, is made, completely through the plate.

Three iron posts, D D D, are screwed into the bed-plate, outside of the dish, which supports a plate, E, also constructed of iron, which is held by nuts *b b b*.

A vertical screw or cam-lever, F, passes through this plate, having a hand-wheel, H, at its top, for turning the screw, and a cap, G, with corrugated or grooved face attached to the lower end, which is pressed down upon the other end of the stick.

The wood to be treated is placed upon end on the sharp-edged projection or flange on the bed-plate, and the screw turned down upon it until a water-tight joint is had around the lower end of the block.

In the hole through the pedestal or bed-plate, a pipe is introduced, which is connected to a force-pump provided with a stop-cock, and charged with the necessary solution, or filled with fluid, such as oil, petroleum, arsenic, sulphate of zinc, carbolic acid, salt-pickle, creosote, or any other preserving-substance which drives the sap in the wood up to the top of the block, and into the grooves *c c*, where it passes off by means of transverse slots, and opens the pores, while the solution is forced up into the timber.

By an ordinary pressure, the solution will be forced into the end of the block or stick of timber about four feet, which will be sufficient for posts that are to be set in the ground; but by a greater forcing-power, the distance may be increased to a great length.

For preserving that portion of the ends of long timbers used in building brick structures, that are placed in the wall, a cap may be secured, by clamps, to the end of the stick, and the fluid forced into the wood three or four feet, or a sufficient distance to preserve it from the damp of the wall.

With two hundred of my machines, which can be constructed at a small cost, set in rows, and connected to one pump, twelve hundred blocks of wood may be treated in one hour, allowing each piece to remain in the frame ten minutes. For treating long timbers, the machine will be made of the desired length.

Having thus described my invention,

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

1. The base or bed-plate A, with the dish or depression B, flange *a a*, and the hole or opening, C, in the bottom of the bed-plate, for forcing the substance into the wood, substantially as described.

2. The upper plate E, screw F, corrugated and grooved cap G, for pressing the timber down upon the flange, and allowing the air and sap to escape as it is forced upward, substantially as described.

In witness whereof, I have hereunto set my hand and seal.

DAVID W. HUNT. [L. S.]

Witnesses:

J. L. BOONE,

GEO. H. STRONG.