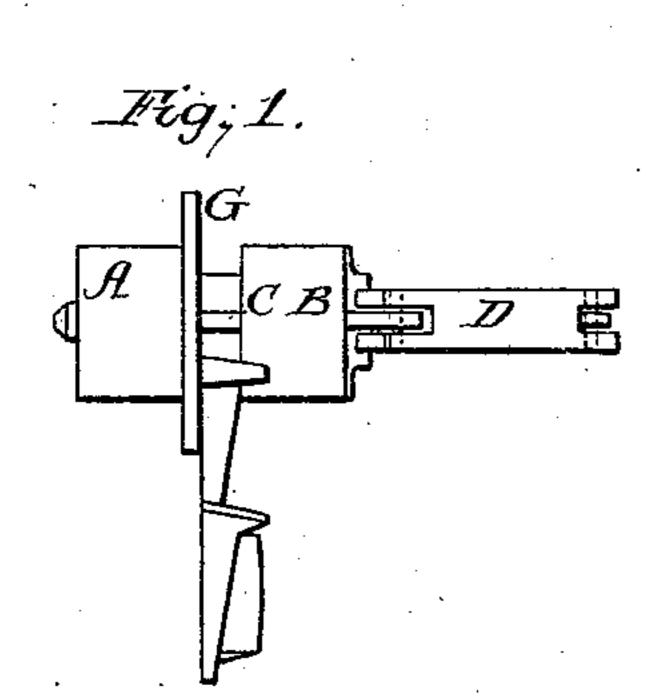
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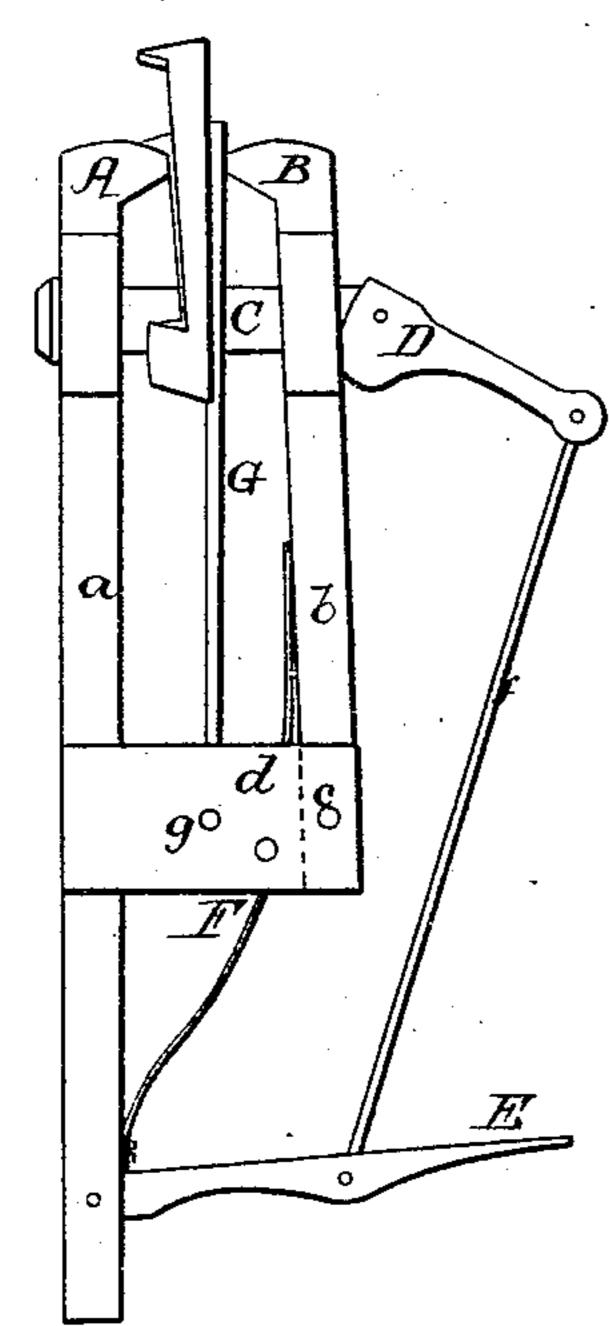
## Horseshoe Calking Vise,

153,733,

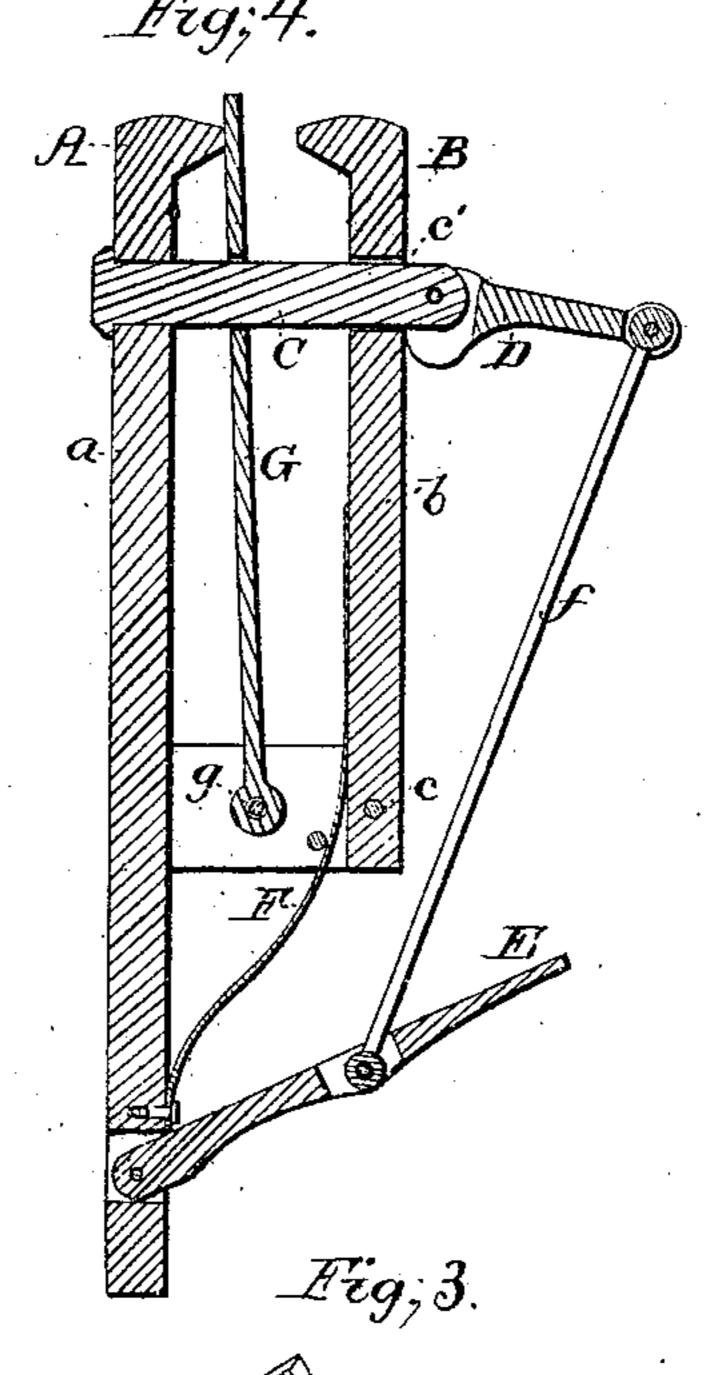
Patented Ans.3, 1866.

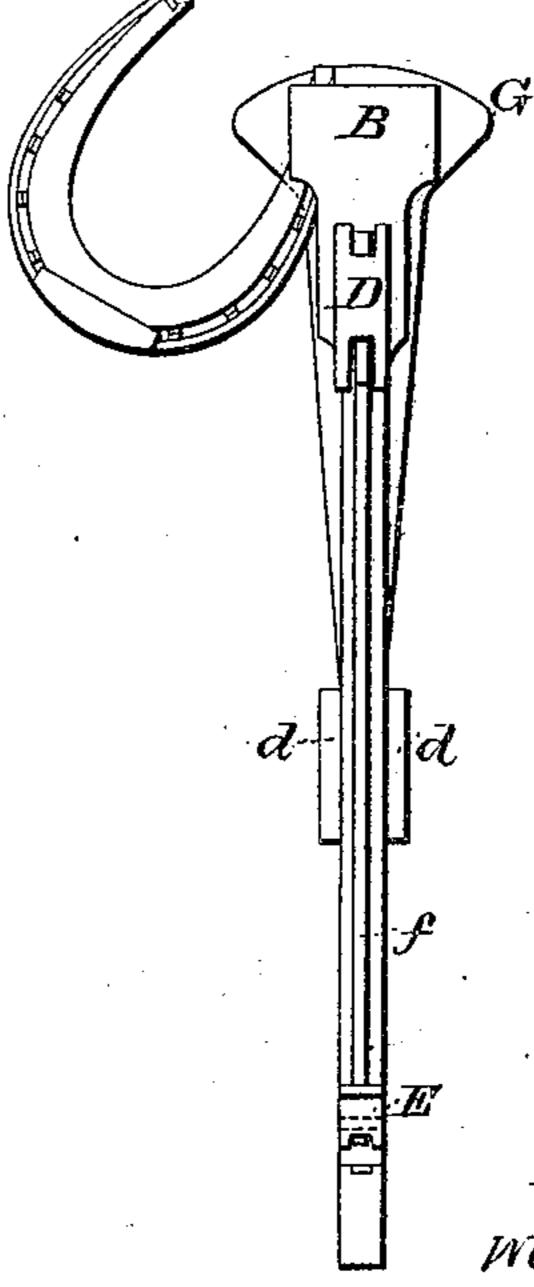


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Witnesses; I Hashbur Daniel ON Apin





Inventor;
William Delanó.

Ty nis attorney.

M. M. Lady

## United States Patent Office.

WILLIAM DELANO, OF BANGOR, MAINE, ASSIGNOR TO HIMSELF AND WALTER K. FOSTER, OF SAME PLACE.

## IMPROVEMENT IN HORSESHOE-CALKING VISES.

Specification forming part of Letters Patent No. 53,733, dated April 3, 1866.

To all whom it may concern:

Be it known that I, WILLIAM DELANO, of Bangor, in the county of Penobscot and State of Maine, have invented a new and useful Horseshoe-Calking Vise; and I do hereby declare the same to be fully described in the following specification, and represented in the accompanying drawings, of which—

Figure 1 is a top view, Fig. 2 a side elevation, Fig. 3 a front view, and Fig. 4 a longi-

tudinal section, of it.

The nature of my invention consists in the combination and arrangement of a vibratory jaw-plate and a common vise having two jaws, such jaw-plate being placed between the said jaws and so as to be used in manner and for the purpose as hereinafter set forth.

In the drawings, A is the stationary, and B the movable, jaw of a vise. The shank b of the movable jaw, at its foot, turns on a pin, c, extending from one to the other of the two plates d d projecting from the shank a of the stationary jaw A. A bolt, C, passing through the shank of the stationary jaw also goes through a slot, c', in the shank b, and is jointed to a cammed lever, D, which is connected with a foot-treadle, E, by means of a rod, f, jointed to the two. By pressing the treadle downward the jaw B will be caused to move toward the jaw A, and by relieving the treadle from such downward pressure a spring, F, fixed to the shank a and bearing against the shank b, will cause the jaw B to move away from the jaw A.

Between the two jaws A B is the vibrating jaw-plate G, which, at its lower end, is supported by, and so as to be capable of turning on, a pin, g, going through it and into the plates d d, the jaw-plate G being thus free to move toward and against either of the grasping-faces of the jaws AB. The upper edge of the jaw-plate G is rounded or curved to or about to the curve of a horseshoe at its toe. The purpose of the said jaw-plate so applied to a

vise is to support the back part of a shoe during the formation of a toe-calk or a heel-calk by hammering the metal for the calk down upon one of the jaws, and also to enable the shoe, while either calk is being made or so hammered down, to be held by tongs in the left hand of the blacksmith.

In accomplishing the formation of the toecalks by the aid of a vise having two jaws only, and one of them extending above the other, the smith can easily hold the shoe by tongs in his left hand while he is hammering down the right calk; but when he has to hold the shoe for the formation of the left calk it would be necessary to shift the tongs into his right hand and hold and work the hammer with the left hand—a matter both awkward and inconvenient in its performance. With the movable or vibratory plate or bearer G, to extend between and above the jaws in manner as represented, the shoe, during the formation of each calk, may be sustained by tongs held in the left hand of the smith, whose right hand will be free to wield the hammer, for after forming one heel-calk against one jaw, and with the shoe griped between the said jaw and the vibratory plate resting against the other jaw, he has only to fix the shoe between the plate and the latter jaw in order to enable him to hammer down the other calk.

What, therefore, I claim as my invention is—

The new or improved horseshoe-calking vise made substantially as described, viz: of the vibratory bearer or plate G and the common vise having two jaws, A B, the whole being arranged and combined substantially in manner and so as to operate as and for the purpose specified.

WILLIAM DELANO.

Witnesses:

F. A. Wilson, Chas. E. Wilson.