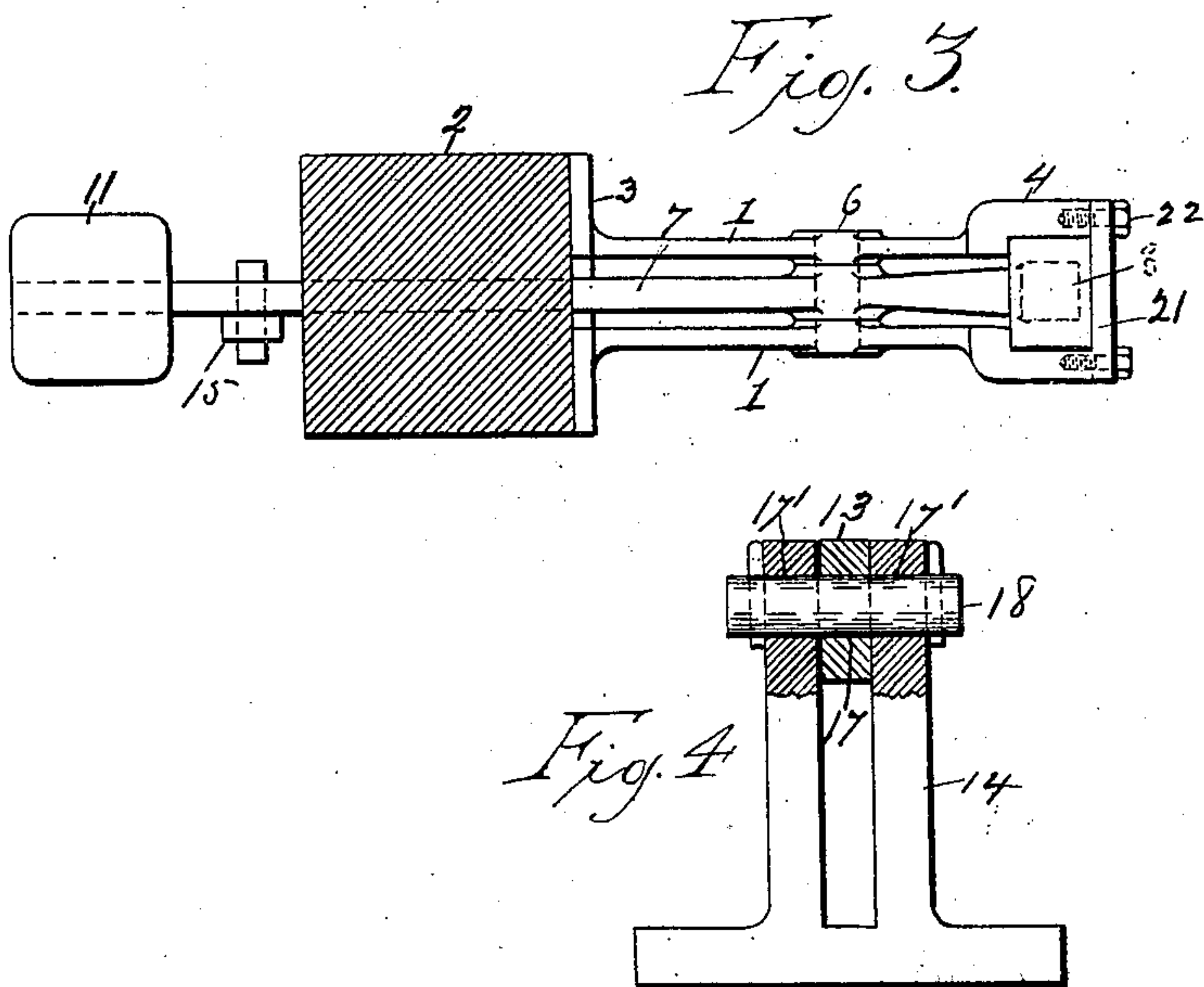
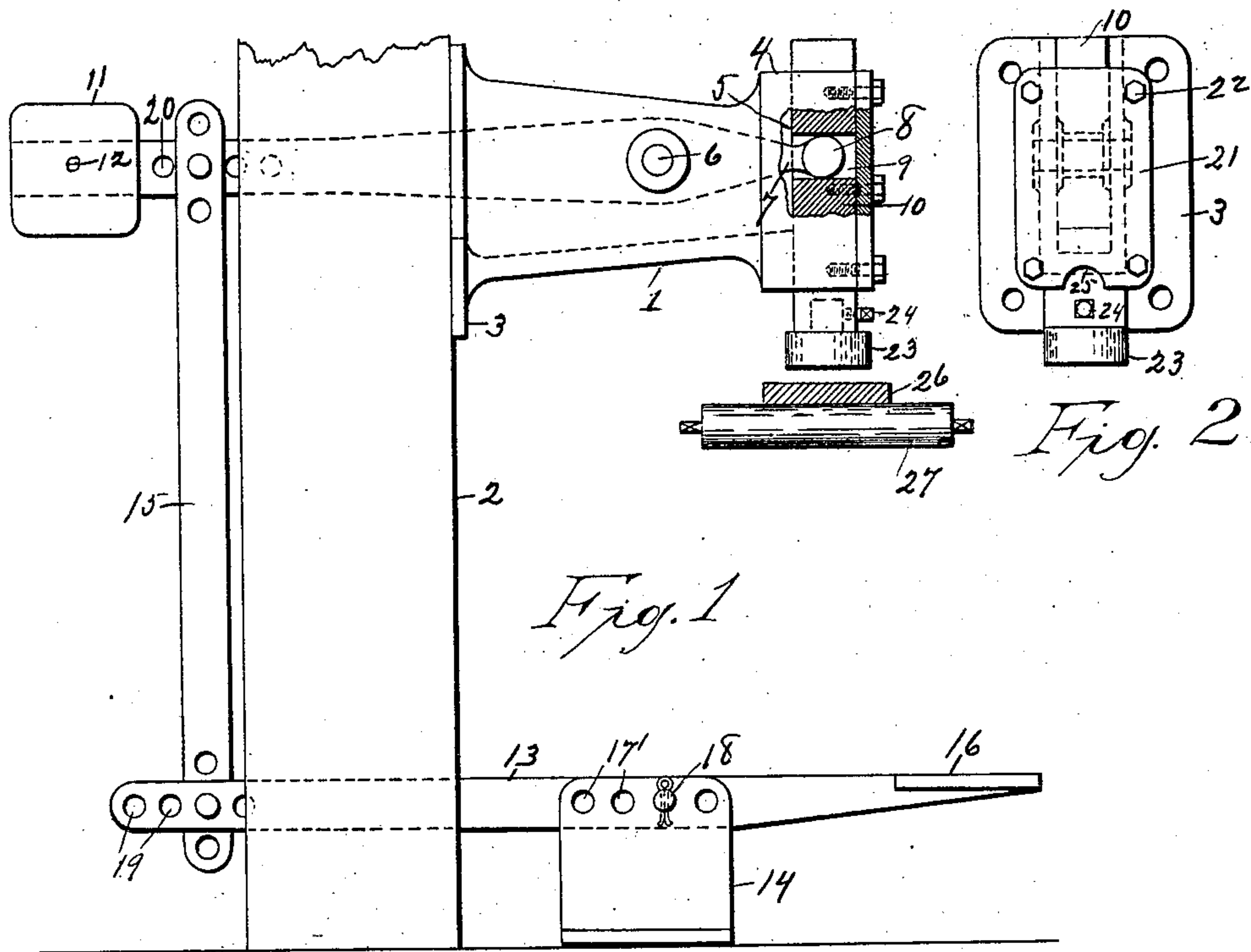


No. 886,364.

PATENTED MAY 5, 1908.

C. E. GLIDDEN.
PLUG DRIVER.

APPLICATION FILED AUG. 17, 1905. RENEWED OCT. 24, 1907.



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UNITED STATES PATENT OFFICE.

CHARLES EDWARD GLIDDEN, OF SISSON, CALIFORNIA.

PLUG-DRIVER.

No. 886,364.

Specification of Letters Patent.

Patented May 5, 1908.

Application filed August 17, 1905, Serial No. 274,614. Renewed October 24, 1907. Serial No. 398,940.

To all whom it may concern:

Be it known that I, CHARLES EDWARD GLIDDEN, citizen of the United States, residing at Sisson, in the county of Siskiyou and State of California, have invented certain new and useful Improvements in Plug-Drivers, of which the following is a specification.

It frequently happens that it is desirable to drive a great number of plugs into holes or openings, as for instance in the manufacturing of good lumber from defective material where the defective portion is first removed, as by means of cylindrical cutters, and the hole thus formed is filled with a plug of a corresponding shape and size that has previously been cut from sound material.

To do this work rapidly and effectively the plug is best driven by means of a reciprocatory plunger which can be operated by a lever arranged conveniently to the foot of the operator.

The present invention comprises a machine for accomplishing this purpose as will be hereinafter more fully set forth.

In the accompanying drawings in which the same reference numeral indicates the same part in each of the views in which it occurs: Figure 1, is a side elevation, partly in section, of one form of machine embodying my invention; Fig. 2 is a front elevation of the upper portion; Fig. 3, is a top plan view of the upper portion; Fig. 4, is a vertical sectional view through the floor bracket and treadle.

Referring more particularly to the drawings 1 indicates the main portion of the body of the machine which consists of a bracket that is adapted to be secured in any desired position, as upon a post or standard 2, by means of the extended base 3. The bracket is slotted longitudinally on top which makes it substantially U shaped in transverse vertical section and has its head 4 provided with a vertical way or recess 5.

Pivotally mounted within the hollow or slotted portion of the bracket by means of a pin or pivot 6 is a lever 7. The forward end of the lever is provided with a suitable head 8 which is preferably cylindrical and fits in a recess 9 in a plunger 10 that is adapted to be reciprocated in the guide or way 5. The sides of the bracket and of the lever at their pivot points are preferably provided with bosses as shown in Fig. 2, to reduce the con-

tact without decreasing the length of the bearings. The rear end of the lever extends through the slotted base 3, and the standard 2 and is preferably provided with a counter-balance 11 that is adapted to be adjustably secured thereon by means of a set screw 12.

A treadle 13 that is pivotally mounted in a floor bracket 14, preferably slotted on top, is connected at its rear end with the rear end of the lever 7 by means of a link or push rod 15 and has its forward end provided with a foot piece 16 in convenient position to the operator or attendant. The intermediate portion of the lever and the sides of the bracket 14 are each preferably provided with a series of perforations 17 and 17¹ respectively for the reception of the pivot pin 18 whereby the fulcrum of the lever can be changed without changing the position of the foot piece at its front end except in its vertical movement. The rear end of the treadle as also the lever 7 may each be provided with a plurality of openings as shown at 19 and 20 respectively, for changing the connection therewith of the push rod 15.

The plunger 10 is kept in the recess 5 by means of a plate 21 which is secured to the front of the head 4 by screws 22 which enter the head at each side of the recess. The lower end of the plunger is recessed longitudinally for the reception of the stem of a head or hammer 23, the stem being secured therein by a set screw 24 and the hammer being broad and flat to engage with the plug without bruising it. The lower edge of the plate 21 is preferably recessed as shown at 25 to prevent its interfering with the set screw when the plunger is raised to its limit.

In using the plug driver as above described the plug is inserted where it is to be driven, as in a board 26 from which a defective portion has been removed and which board is held upon a suitable support 27 directly under the plunger 10. The attendant then places his foot upon the foot piece 16 and presses down which will cause the plunger to descend and drive the plug into the opening in the board. As soon as he removes his foot the counter-balance will immediately return the parts to their original position ready for another operation.

In this manner the plugs can be very quickly and accurately driven into place as the force is applied in a straight line and there is no danger of marring either the plug

or the board as there might be with a smaller sized hammer or an uneven blow as by hand. The machine is strong and compact and can be conveniently located without taking up
 5 much floor space and can be operated without the use of other driving mechanism.

By making the top of the bracket open, or slotted longitudinally, the lever is given plenty of room in which to move and it can
 10 be easily placed in position or as easily removed, and by retaining the plunger in position by means of the plate it can also be readily removed and replaced thereby rendering all of the parts readily accessible and
 15 adding to the convenience of the machine.

Having described my invention I claim:

1. In a plug driver, a bracket substantially U shaped in vertical cross section, the forward end of which is provided with a vertical way, a lever pivotally mounted in the
 20 bracket, the rear end of which projects beyond the base of the bracket and the forward end extends into said way and is provided with a rounding head, a plunger in
 25 said way, the intermediate portion of which is recessed for said head, a plate on the end of the bracket over said way, a counter-balance on the rear end of the lever, and a
 30 treadle connected with the rear end of the lever for operating it.

2. In a plug driver, a longitudinally slotted bracket, one end of which is provided with an expanded base and the other with a head having a vertical way formed therein
 35 and the sides of the main portion are perforated and provided with a boss upon each side around said perforation, a lever in the bracket, the rear end of which projects

through the base and is provided with a plurality of openings and the forward end projects into said way and is provided with a
 40 curved head and the intermediate portion is perforated and provided with a boss upon each side at said perforation, a pivot pin through the perforations in the sides of the
 45 bracket and the perforation in the intermediate portion of the lever, a recessed plunger in said way and in engagement with the head of the lever, a plate for holding said
 50 plunger in the way, a counter-balance on the rear end of the lever beyond the plurality of openings at its rear end, and a link pivotally connected with the perforated end respectively of the treadle and the lever.

3. In a plug driver, a longitudinally slotted bracket, the forward end of which is provided with a vertical recess, a lever pivotally mounted in the bracket with its forward end within said recess and provided with a cylindrical head, a plunger in said recess with
 60 its intermediate portion recessed for the reception of the head of the lever and its lower end recessed longitudinally, a hammer, with its stem in said longitudinal recess, a set-screw for engaging with said stem, a plate on
 65 the forward end of the bracket, the lower end of which is recessed to prevent engagement with the set-screw, and a treadle for actuating said lever.

In testimony whereof I affix my signature, in presence of two witnesses, this 22nd day of July 1905.

CHARLES EDWARD GLIDDEN.

Witnesses:

M. R. SEELY,
 W. S. BOYD.