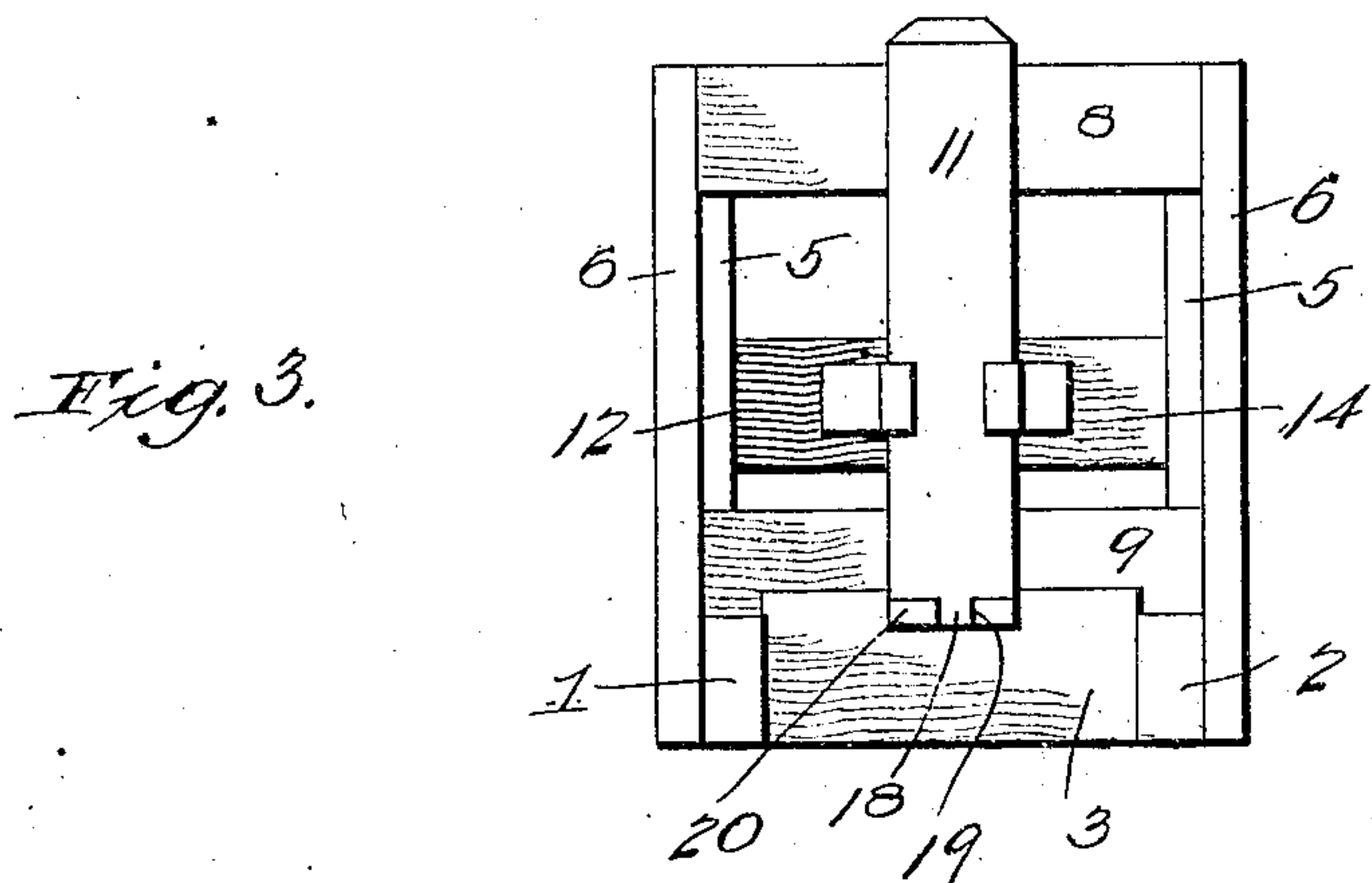
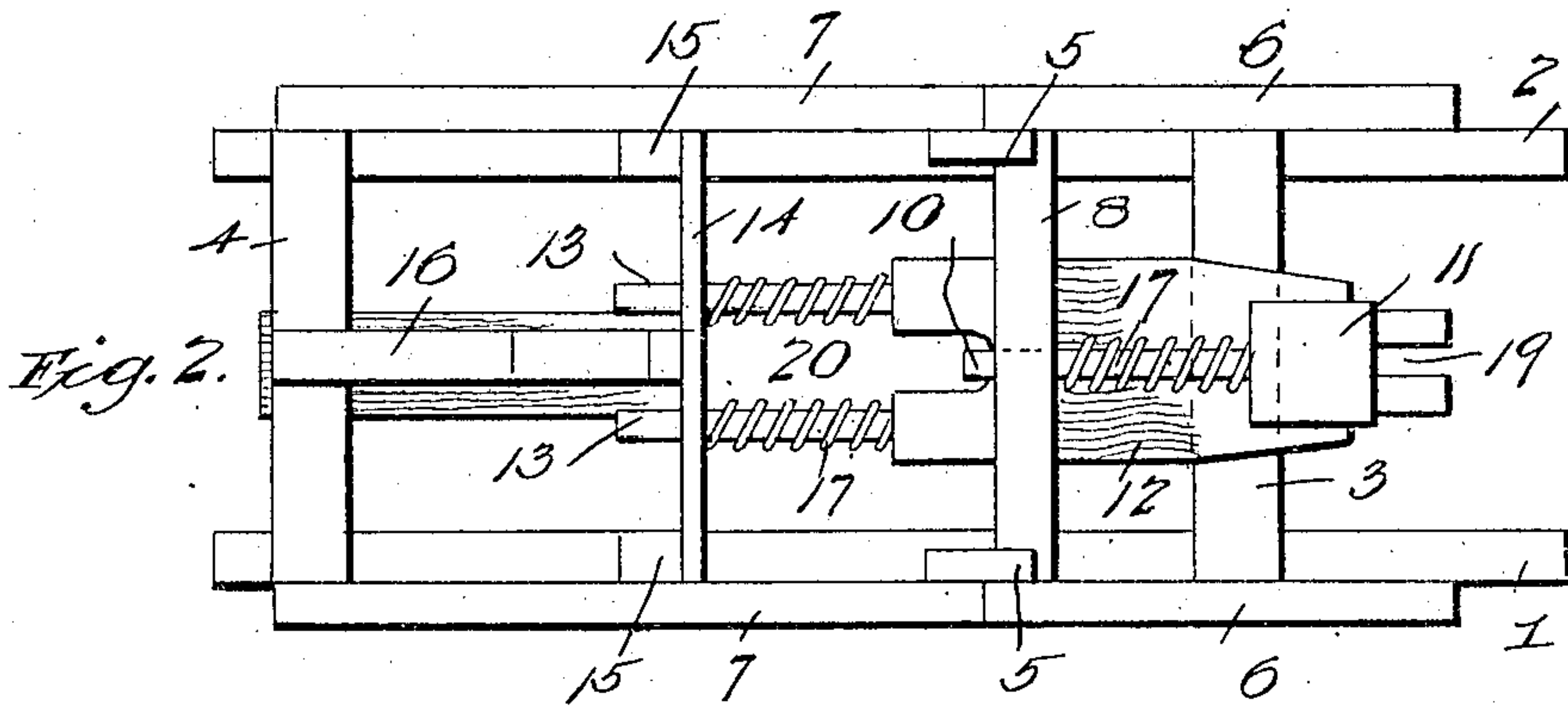
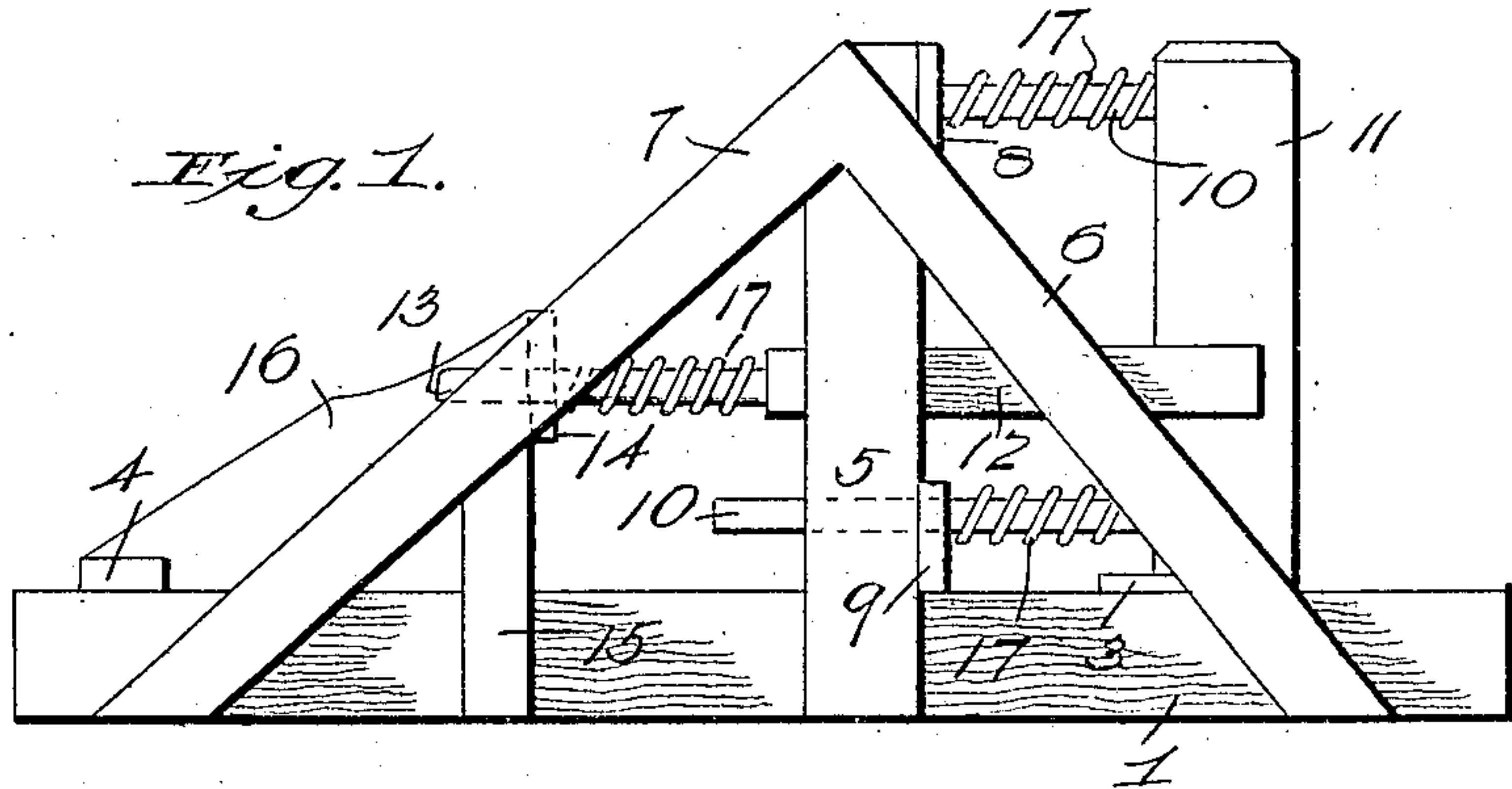


No. 882,147.

PATENTED MAR. 17, 1908.

G. HOPSON.
BUMPING POST.

APPLICATION FILED JULY 1, 1907.



Witnesses
J. L. Macchiarie
E. C. Procher.

Inventor
George Hopson
By *George S. Vashon*
Attorney

UNITED STATES PATENT OFFICE.

GEORGE HOPSON, OF DICKSON, TENNESSEE.

BUMPING-POST.

No. 882,147.

Specification of Letters Patent.

Patented March 17, 1908.

Application filed July 1, 1907. Serial No. 381,685.

To all whom it may concern:

Be it known that I, GEORGE HOPSON, a citizen of the United States, residing at Dickson, in the county of Dickson and State of Tennessee, have invented new and useful Improvements in Bumping-Posts, of which the following is a specification.

This invention relates to bumping-posts.

The object of the invention is to provide an apparatus of this character which shall be thoroughly effective in receiving and absorbing jars due to impact between it and a railway car, and in such manner that no damage will accrue to either from a blow. Furthermore, to construct and assemble the parts of the post in such manner as that they shall be best adapted for resisting strains, and for remaining in operative condition for an extended period, irrespective of atmospheric or other conditions.

With the above and other objects in view, as will appear as the nature of the invention is better understood, the same consists in the novel construction and combination of parts of a bumping-post as will be hereinafter fully described and claimed.

In the accompanying drawings forming a part of this specification and in which like characters of reference indicate corresponding parts, Figure 1 is a view in perspective of a bumping-post constructed in accordance with the present invention. Fig. 2 is a top plan view. Fig. 3 is a front elevation.

The bumping-post embodies a base comprising two sill beams 1 and 2 connected near their forward ends by an interposed cross beam 3 and near their rear ends by a superposed cross beam 4. Secured, in this instance, exteriorly of the sill beams are two standards or uprights 5 which are stayed and rendered rigid by pairs of angularly disposed brace bars 6 and 7 which are secured respectively to the sill beams and to the upper portions of the uprights. To the front edges of the uprights are secured two guide bars 8 and 9 that not only subserve the function that their names indicate, but also the further function of bracing the uprights against liability of yielding to lateral strains. Each of these guide bars is provided with an orifice in which work slide rods 10 that are secured in any suitable manner to a bumper or buffer 11. Secured to the buffer 11 is a plunger 12, the rear portion of which is provided with slide bars 13 that are adapted to work in

orifices in a guide bar 14 secured between the rear brace bars, and held against liability of yielding to downward pressure by a pair of uprights 15 rigidly secured to the sill beams 1 and 2 and to the brace bars. The guide bar 14 is further braced against liability of yielding to impact by an angularly disposed brace bar 16, one end of which is secured in any suitable manner to the guide bar 14 and the other end to the cross beam 4.

Mounted upon the two sets of slide bars 10 and 13, and adapted to engage respectively with the buffer and the guide bars 8 and 9 and rear portion of the plunger and guide bar 14 are coiled springs 17, which may be constructed to present any desired resistance to shocks, whereby to render the apparatus thoroughly efficient in use.

In order to guide the buffer in movements, and also to relieve strain from the slide bars and the parts with which they coact, the lower end of the buffer is provided with a fin 18 that is adapted to engage a groove 19 in a bar 20 secured respectively to the cross beams 3 and 4. It will be seen by reference to Fig. 3 that the coaction between the fin 18 and the groove 19 will be such that any tendency on the part of the plunger to have lateral movement as from strains or shocks will be positively precluded so that lighter slide bars may be employed than would otherwise be required.

As shown in Fig. 2, the rear end of the plunger is bifurcated to form two arms, each of which is adapted to carry one of the slide bars 13, and this arrangement is adapted for the purpose of reducing weight of the plunger, but it will be apparent that this is not essential, as the plunger may be made solid throughout and still be in the scope of the invention.

It will be seen from the foregoing description that although the improvements herein defined are simple in character, that they will cooperate in the production of a thoroughly efficient bumping-post, and further that provision is made whereby destructive strains will be prevented.

What I claim is:

1. A bumping-post comprising a base, uprights carried thereby, guide bars carried by the uprights and provided with openings, a plunger carrying slide bars engaging openings in one of the guide bars, a buffer carried by the plunger and having slide bars to en-

gage the openings in the other guide bars, and springs carried by the slide bars to retain the bumper in yielding position.

2. A bumping post comprising a base, 5 guide bars supported upon the base, a spring-controlled plunger carrying slide bars extending through one of the guide bars, and a spring-controlled buffer carried by the plunger and having slide bars extending through 10 the other of the guide bars.

3. A bumping post comprising guide bars, supporting means therefor, one of said guide bars arranged forwardly of the other, a plunger carrying slide bars extending through the 15 rearward guide bar, a buffer carried by the plunger and having slide bars extending through the forward guide bar, and compression springs mounted upon the slide bars.

4. A bumping post comprising a base, 20 guide bars supported upon the base, a spring-controlled plunger carrying slide bars extending through one of the guide bars, a

spring controlled buffer carried by the plunger and having slide bars extending through the other of the guide bars, and means engaging the lower end of the buffer and in connection with the slide bars for preventing lateral movement of the buffer when shifted.

5. A bumping post comprising a plunger having rearward extensions, guides for said 3 rearward extensions, a vertically-extending buffer connected to the forward end of the plunger and having rearward extensions, guides for the rearward extensions of the buffer, and compression springs mounted 3 upon the rearward extensions of the plunger and the rearward extensions of the buffer, combined with supporting means.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE HOPSON.

Witnesses:

WILL HALL,
B. G. PETTY.