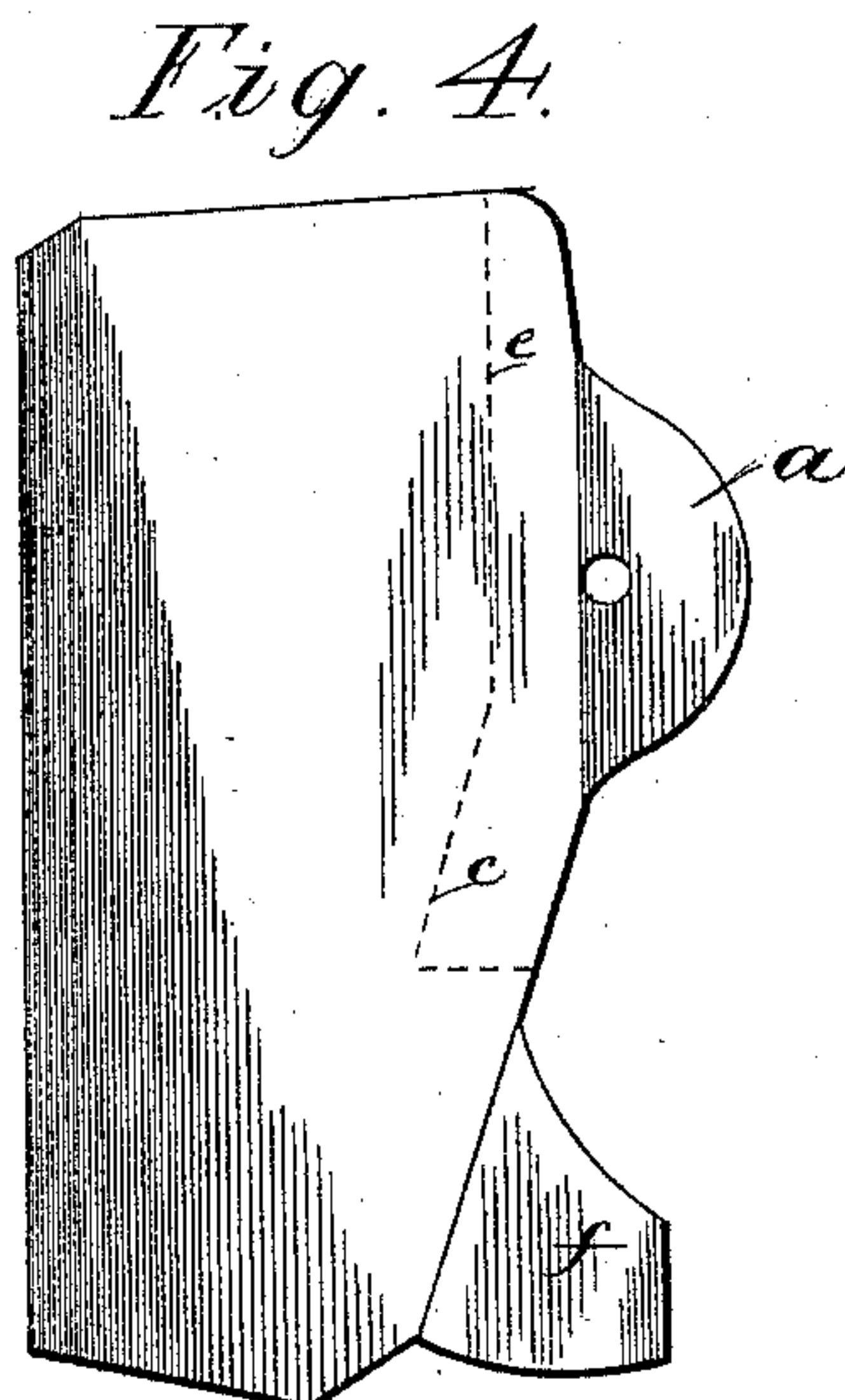
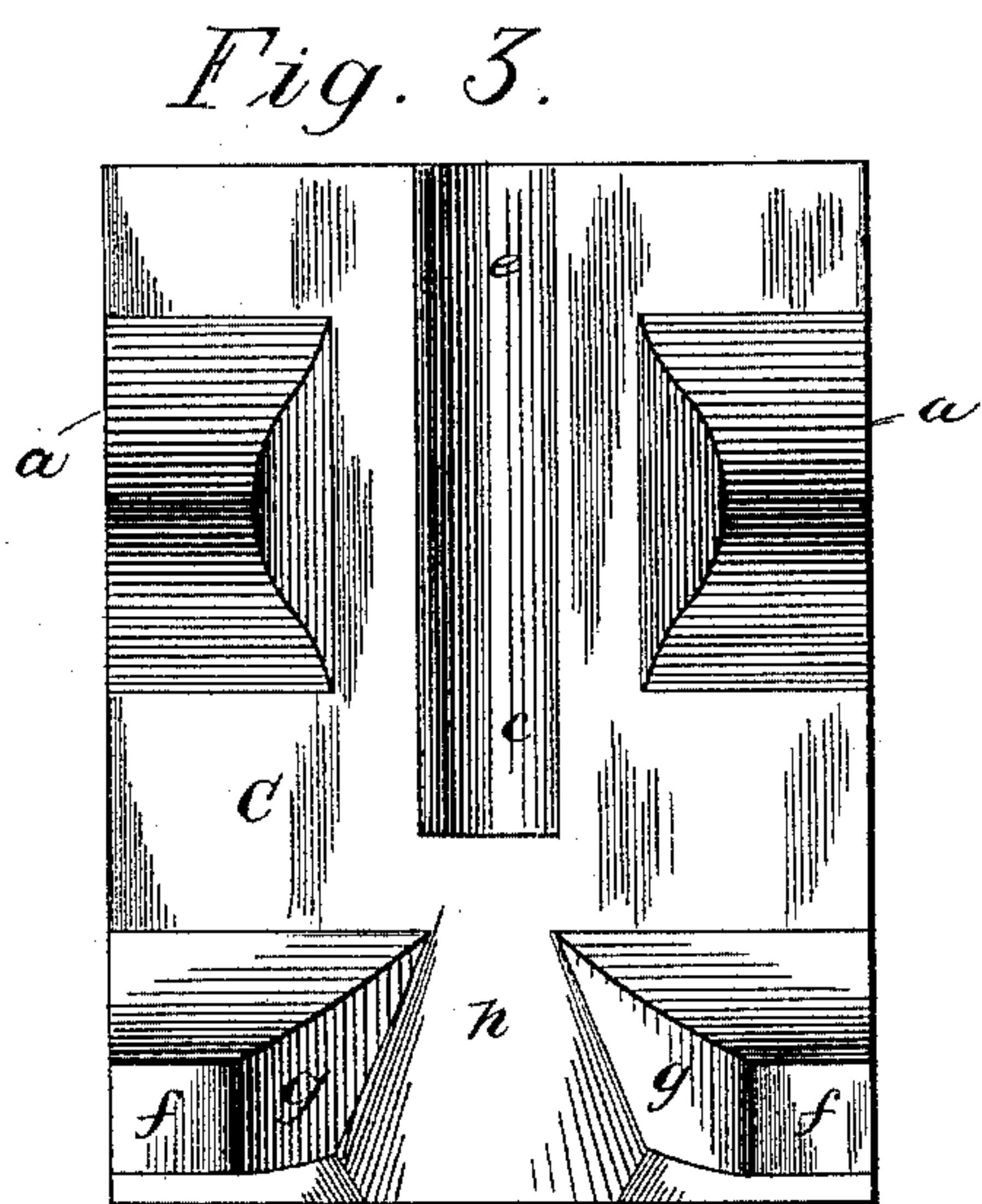
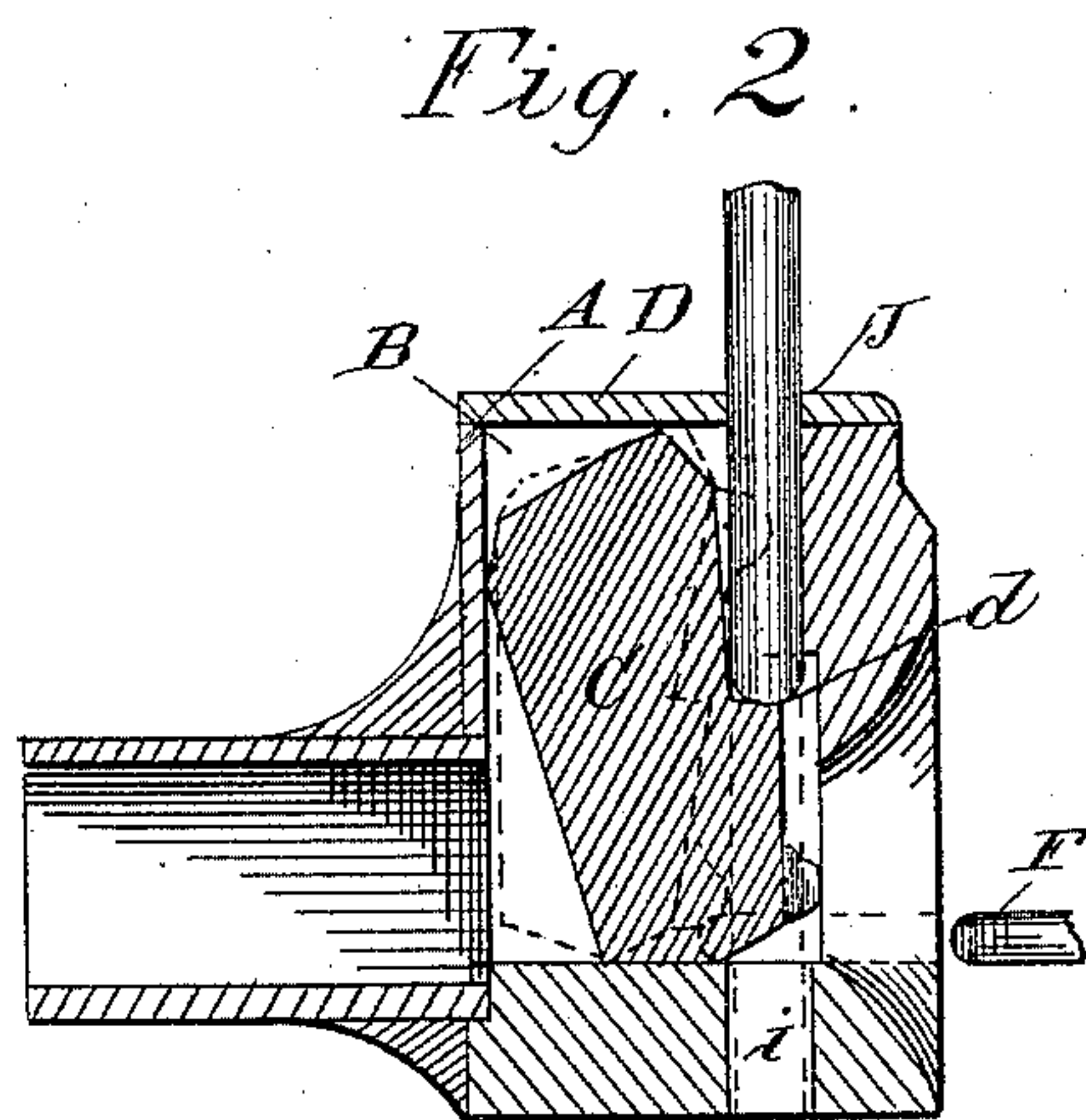
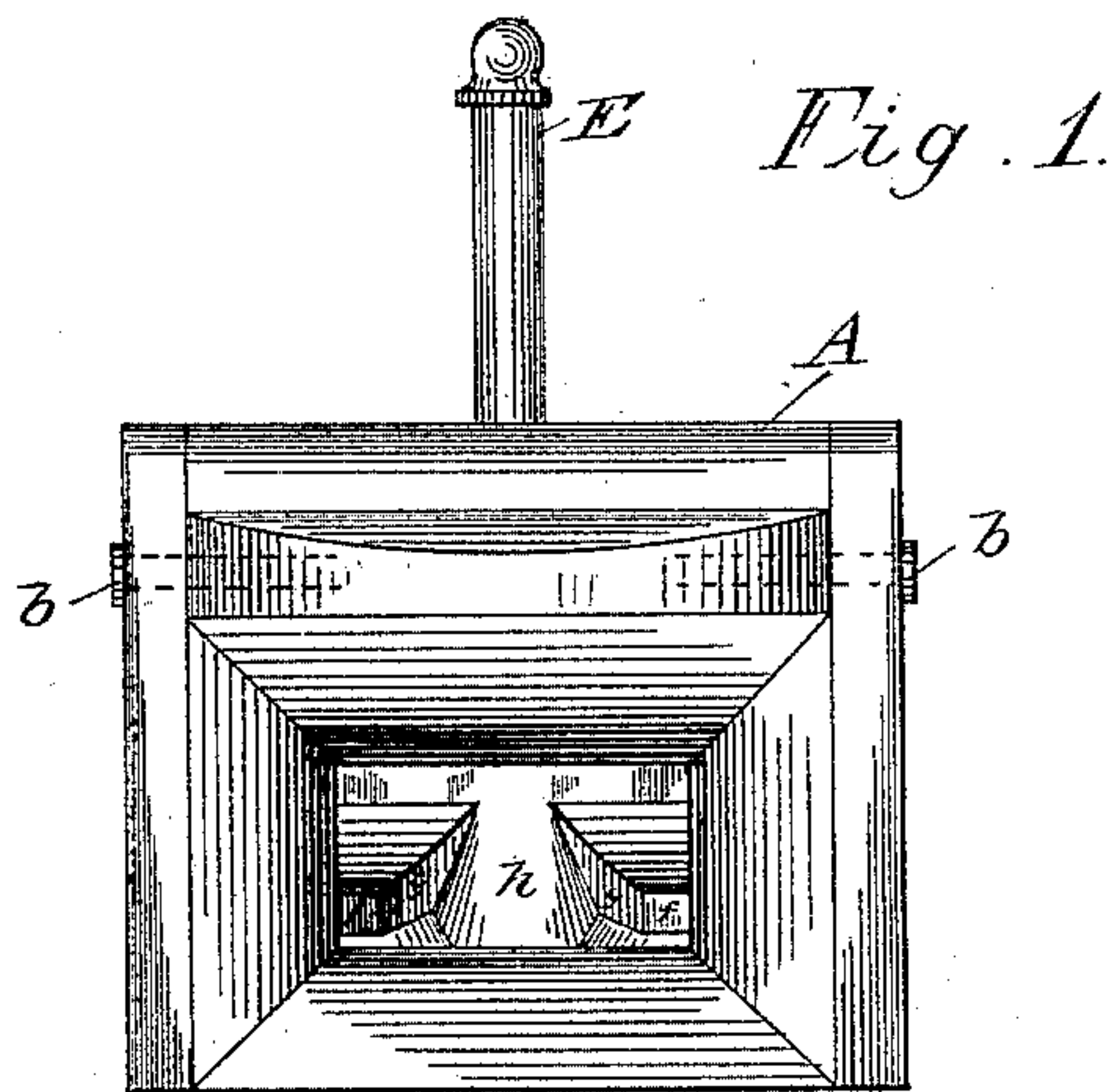


(No Model.)

D. H. YOUNG.
CAR COUPLING.

No. 448,769.

Patented Mar. 24, 1891.



Witnesses
Arthur A. Erb.
Leonard H. Ryer.

Inventor
Daniel H. Young
by *Paul L. Dyer*
his Attorney

UNITED STATES PATENT OFFICE.

DANIEL H. YOUNG, OF FORT PIERRE, SOUTH DAKOTA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 448,769, dated March 24, 1891.

Application filed October 24, 1890. Serial No. 369,179. (No model.)

To all whom it may concern:

Be it known that I, DANIEL H. YOUNG, a citizen of the United States, residing at Fort Pierre, in the county of Stanley and State of South Dakota, have invented certain new and useful Improvements in Car-Couplers; and I do hereby declare the following to be a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to various new and useful improvements in car-couplers; and the principal object of my invention is to provide and produce an improved coupling device which will be very cheap to manufacture and effective and automatic in use.

Another object is to provide a car-coupler wherein the link will be held in a horizontal position, so that it will engage with the adjoining coupler without the necessity of being elevated by hand; and a still further object of my invention is to provide a car-coupling device wherein the various parts will automatically return to an operative position as soon as the pin is withdrawn.

The principal novelties in the invention consist of a buffer differing from the ordinary buffers, a pivoted dog within the buffer, arranged so as to hold the pin in an elevated position and adapted to be moved pivotally by the entering link and arranged so as to hold the link in a horizontal position for the purpose above mentioned, all as will be more fully herein-after described and claimed.

For a better comprehension of my invention attention is directed to the accompanying drawings, forming a part of this specification, and in which—

Figure 1 is a front elevation of the invention; Fig. 2, a section of the same; Fig. 3, a front view of the dog, and Fig. 4 a side view of the same.

In all of the above views corresponding parts are designated by the same letters of reference.

A is the buffer, which is attached in any suitable way to the ends of the car. The manner of attaching the buffer to the car is not within the spirit of the present invention and need not be described here; but it is by preference an elastic connection, so that the concussion caused by the two cars coming to-

gether will be effectively taken up. The buffer A is provided with an enlarged rectangular central portion B for holding the dog, to be described presently, and in this respect the buffer A differs from the ordinary buffer.

C is the dog, which is pivoted within the rectangular enlargement B. This dog is provided with the ears *a a* on its front face and with which pivoting-pins *b* engage. The front face of the dog is recessed at *c*, and this recess is provided with a square shoulder *d* at its lower end. Another recess *e* is formed in the upper portion of the front face of the dog and is arranged at an angle to *c*, as shown. On the lower portion of the front face of the dog are formed lugs *f f*, the objects of which will be set out presently. The lower portion of the dog and lugs *f* are cut away at *g* and *h*, as shown, so as to form a concave or hollowed-out portion. The front portion of the inside of the enlargement B is provided with a semi-circular groove *h*, against which the pin when in position, and the lower portion of the buffer is provided with a hole *i* therein for receiving the lower end of the pin.

The enlargement B is provided with a cover D, adapted to be screwed or bolted in position. This cover is to be secured in place after the dog has been properly fixed within the buffer. The cover D is provided with a recess *j*, which is a continuation of the recess *h*.

From the description which has just been given the operation of the device will be understood to be as follows: The dog, by being pivoted at the lugs *a*, will hang loosely in an oblique direction, so that the shoulder *d* will be directly in line with the recesses *h* and *j*. The pin E, which is of ordinary construction, is now inserted through the recess *j*, so as to rest on the shoulder *d* and be held in an elevated position. When the link F is introduced into the buffer, it will swing the dog backwardly, so as to allow the pin E to fall with its lower end in engagement in the opening *i*, and the link F will therefore be firmly locked and held within the buffer. The dog by its weight will tend to regain its original inclined position and the concaved part *g g h* will drop down over the link, as shown, so as to hold the same in a horizontal position. In this way the necessity of holding the link in a horizontal position by hand is overcome when it is to

be introduced into the buffer of the adjoining car. When the pin E is withdrawn for the purpose of uncoupling the device, the dog C will regain its original inclined position automatically by reason of its weight and the manner in which it is pivoted.

Having now described my invention, what I claim as new therein, and wish to secure by Letters Patent, is as follows:

10 In a car-coupler, the combination of the buf-

fer A, having an enlarged portion B, a dog C, pivoted within the same and having the concaved portion *g* and *h* for the purpose mentioned and with a shoulder *d* for supporting the pin, substantially as set forth.

DANIEL H. YOUNG.

In presence of—

R. G. VAN ANTWERP,

CRAWFORD HUTCHINSON.