

No. 754,919.

PATENTED MAR. 15, 1904.

F. CHARRON & L. GIRARDOT.

CLASP.

APPLICATION FILED MAR. 22, 1902. RENEWED JAN. 12, 1904.

NO MODEL.

FIG.3.

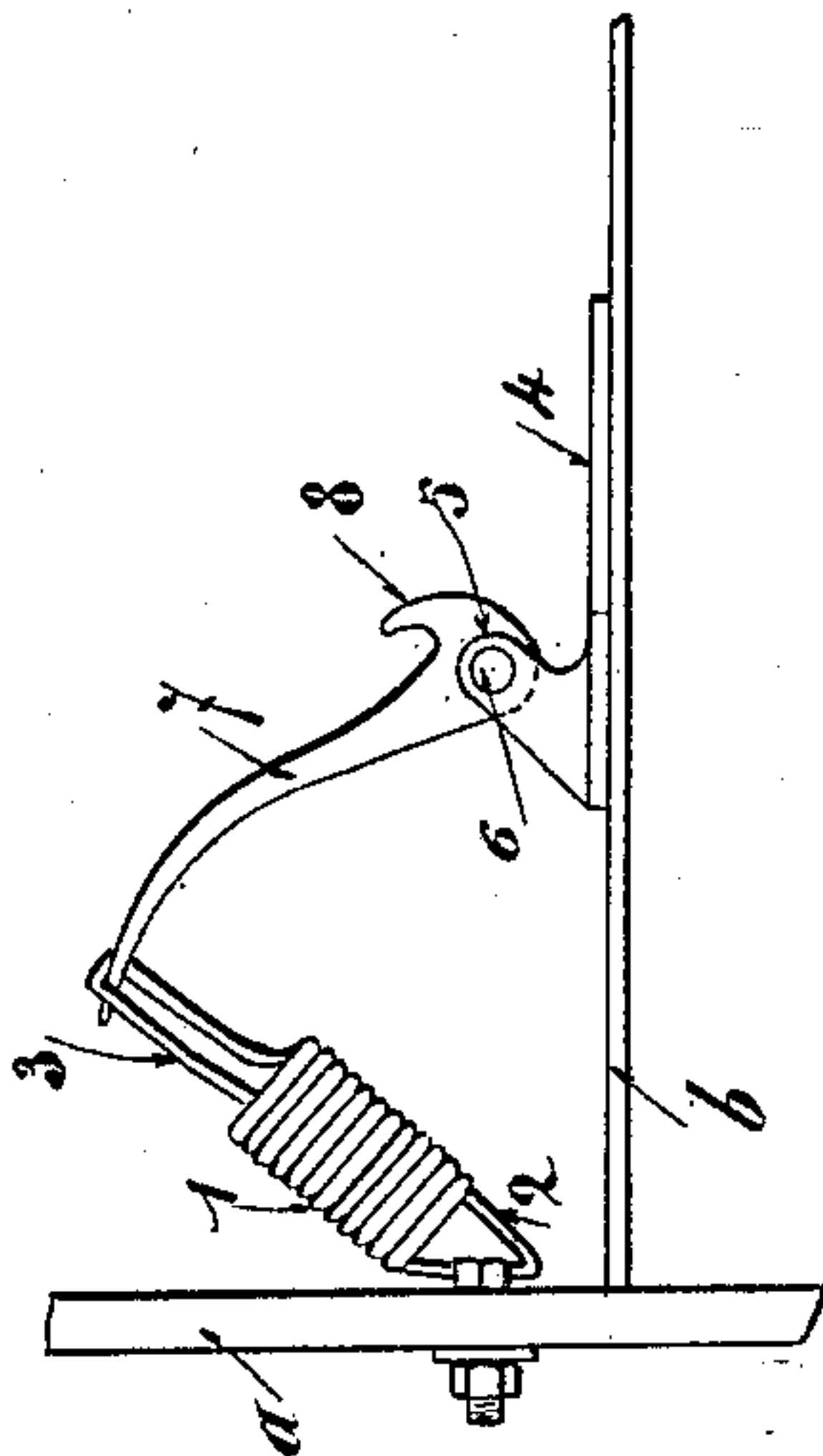


FIG.4.

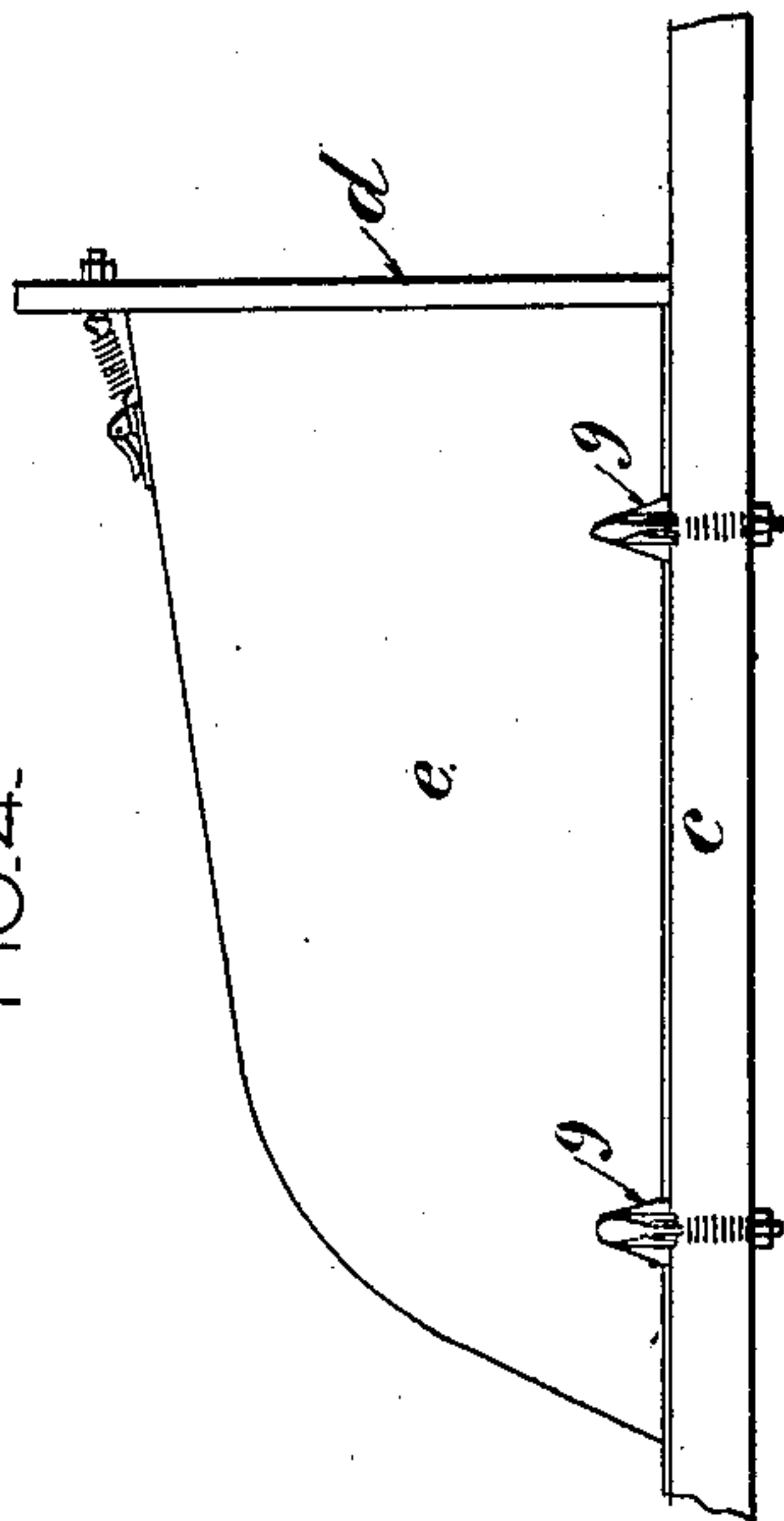


FIG.1.

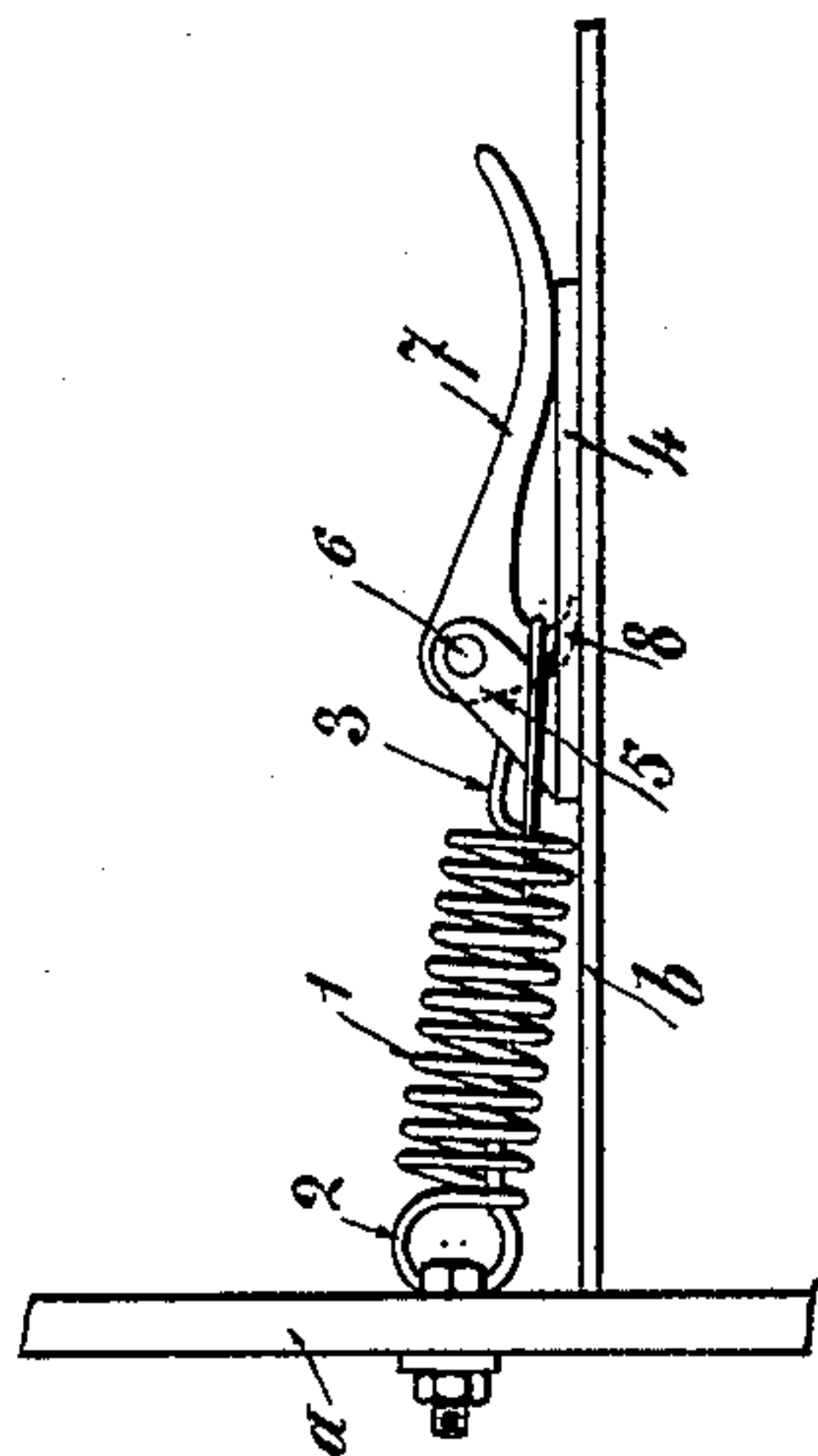
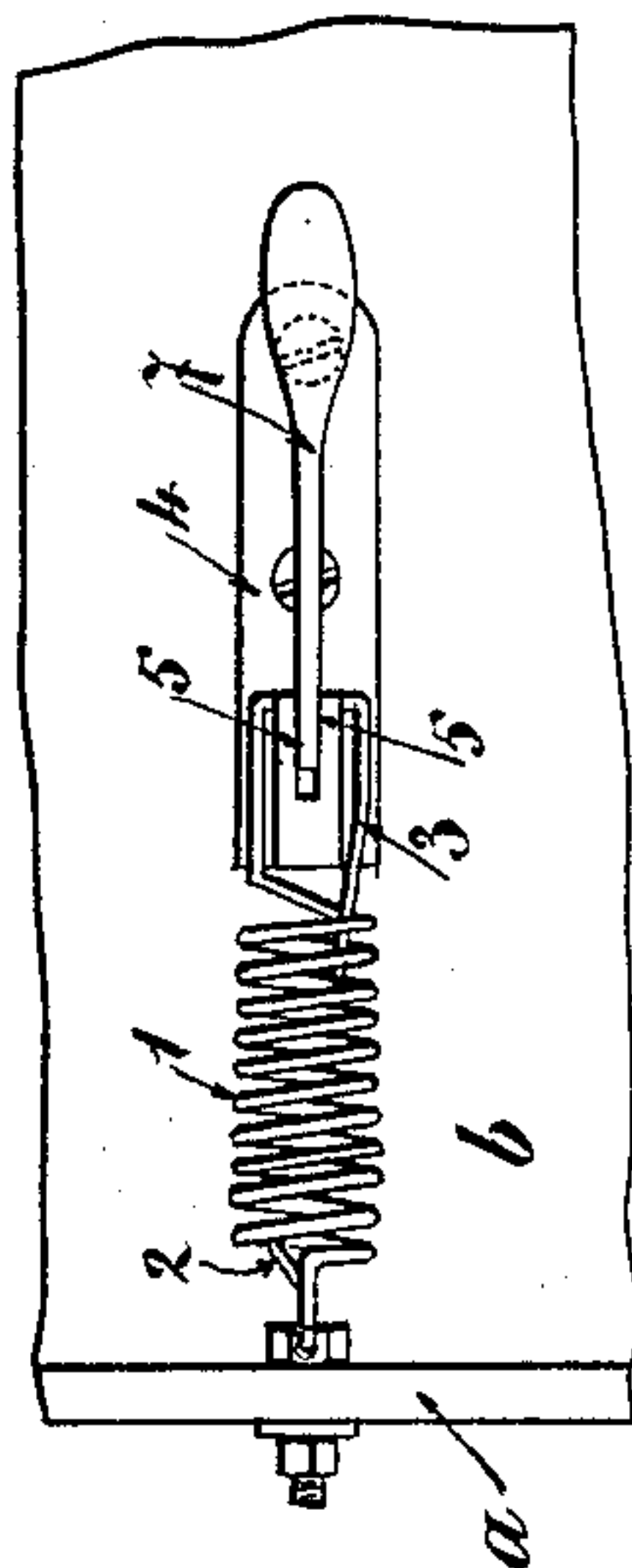


FIG.2.



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UNITED STATES PATENT OFFICE.

FERDINAND CHARRON AND LÉONCE GIRARDOT, OF PARIS, FRANCE.

CLASP.

SPECIFICATION forming part of Letters Patent No. 754,919, dated March 15, 1904.

Application filed March 22, 1902. Renewed January 12, 1904. Serial No. 188,798. (No model.)

To all whom it may concern:

Be it known that we, FERDINAND CHARRON and LÉONCE GIRARDOT, citizens of the Republic of France, both residing at No. 45 Avenue de la Grande Armée, Paris, in the Republic of France, have invented a certain new and useful Improved Clasp, of which the following is a specification.

This invention relates to improvements in clasps.

The invention has for its object to provide a means whereby separate pieces of rigid material may be quickly and firmly clasped together and as easily and quickly separated.

The invention also has for its object not only to clasp together two separate pieces, as aforesaid, but also to provide mechanism whereby such pieces may be locked in clasped position and also quickly unlocked and separated.

The invention has also divers other objects, which will be fully hereinafter set forth.

The invention consists in the combination of a spring and a lever, one attached to each of two different pieces of material and arranged so that when said lever and spring are engaged the resilience of the spring will be made to draw the said two pieces of material into firm and rigid contact.

The invention also consists in the combination, with a helical spring pivotally attached to one piece of material and having a loop at its free end, of a bent lever pivoted to another piece of material and arranged so as to engage said loop and by being turned one way to somewhat unbend said spring, cause it by its resilience to bring said pieces of material into firm contact and to lock the mechanism in such position, and by being turned the other way to release the mechanism so that the said pieces may be separated.

The invention also consists in divers other novel features, which will be fully understood from the following general description and the annexed drawings and will be subsequently pointed out in the claims.

In the accompanying drawings, which are hereby made a part of this specification, Figure 1 is a side view of our newly-invented clasp, showing the parts in clamped position.

Fig. 2 is a plan view of the same. Fig. 3 illustrates the same when the lever begins to engage the spring. Fig. 4 illustrates the uses to which our said clasp may be put in clamped position.

In the same drawings, 1 designates a helical spring. This spring has at one end the loop 2 and at the other end the loop 3. The loop 2 is illustrated as being hooked into the head of a screw in the upright piece *a*.

4 designates a metallic plate securely fastened to the horizontal piece *b*. This plate has ears 5.

7 8 designate a lever. The part 7 is bent as illustrated. The part 8 is in the form of a hook or bill, as illustrated, and nearly at right angles to the part 7. This lever is pivoted in the ears 5 by the pin 6. The whole device is to be substantially as illustrated in the drawings.

To use our invention, the parts are assembled as illustrated in Fig. 3. The loop 2 of the spring 1 is pivotally attached to the upright *a*. This attachment may be effected by means of a screw, into the head of which it is hooked, as here illustrated, or in any other available way. The lever 7 8 is pivoted in the ears 5 of the plate 4. The part *a*, to which the said spring is attached, and the part *b*, to which the plate 4, carrying the lever 7 8, is attached, are brought close enough together for the end 7 of the lever 7 8 to engage the loop 3, as illustrated in Fig. 3. Then as the end 7 of the lever is turned away from the upright *a* the spring 1 will gradually unbend and the loop 3 slip down the lever toward the end 8 until the lever has assumed the position illustrated in Figs. 1 and 2. It will then be found that on account of the spring engaging the screw which is fastened in the upright *a* with one end and the bill 8 of the lever 7 8, which is, as before described, fastened on the horizontal piece *b*, with its other end will by its resilience perform two functions: First, it will hold the two parts *a* and *b* in firm contact with each other, and, second, partly on account of the shape of the lever 7 8 and partly on account of its resilience, it will hold the said lever firmly locked in position, so that the spring cannot recoil, and the parts will remain steady.

ily in that position; but if the end 7 of the lever be turned again toward the upright α the contrary effect will be produced and the parts being released can be easily separated.

5 It may be desirable to have the ears 5 project as little as possible above the edge of the plate 4. In order to effect this, a recess may be made in the plate 4 between the ears to allow the lever to be pivoted nearer down to
10 the plate, and then in consequence thereof the ears may be made shorter.

As this device is equally applicable to the fastening on the covers of boxes and bins and divers other receptacles and to fastening on
15 ornamental and useful metallic fittings and in divers other ways and for divers other mechanism, we do not confine ourselves strictly to the construction and arrangement hereinbefore set forth, as it is evident that under the
20 scope and spirit of our invention we can make slight variations without departing therefrom.

Having now described what our invention is and how the same is constructed and used, what we claim, and desire to secure by Letters
25 Patent, is—

1. The combination of one piece of rigid material and a spring thereto attached, of another piece of rigid material and a lever thereto attached and all arranged so that when the
30 said lever and the said spring are engaged, the resilience of the said spring may be made to draw the said two pieces into firm contact.

2. The combination of one piece of rigid material and a spring having a loop, and pivoted thereby to said piece, of another piece
35 of rigid material and a lever pivoted thereto, and all the parts so arranged that when the said lever engages the said spring it may be made, by its resilience, to draw the said pieces
40 into firm contact.

3. The combination with one piece of rigid

material, and a spring having a loop at each end thereof, and pivoted by one of said loops, to said piece of another piece of rigid material, and a lever pivoted thereto, and all so
45 arranged that when the said lever engages the free loop of said spring, the said spring may be made, by its resilience, to draw the said pieces into firm contact.

4. The combination with one piece of rigid
50 material, and a helical spring having a loop at each end thereof, and pivoted by one of said loops to said piece, of another piece of rigid material, a metallic plate, having ears, fastened thereon, a lever pivoted in said ears,
55 and all arranged so that when the said lever engages the loop on the free end of the said spring, the spring may be made by its resilience to draw the said pieces into firm contact.

5. The combination with one piece of rigid
60 material, a screw in said piece, and a helical spring, having a loop on each end and pivotally fastened to said screw by one of said loops, of another piece of rigid material, a metallic plate, having ears, fastened thereon,
65 and a lever having two parts, one a longer bent part, and the other a shorter bill part, pivoted in said ears, and all arranged so that when said lever engages the loop on the free
70 end of said spring, it will by being turned in one direction cause the said spring by its resilience to draw the said pieces into firm contact, and by being turned in the opposite direction to release the parts so that they may
75 be easily separated.

In witness whereof we have hereunto set our hands in presence of two witnesses.

FERDINAND CHARRON.
LEONCE GIRARDOT.

Witnesses:

ANTOINE LAVOIX,
EDWARD P. MACLEAN.