

(No Model.)

J. A. COULTAUS.

MANIPULATING ROD FOR BOLTS, &c.

No. 357,116.

Patented Feb. 1, 1887.

Fig. 3.

Fig. 1.

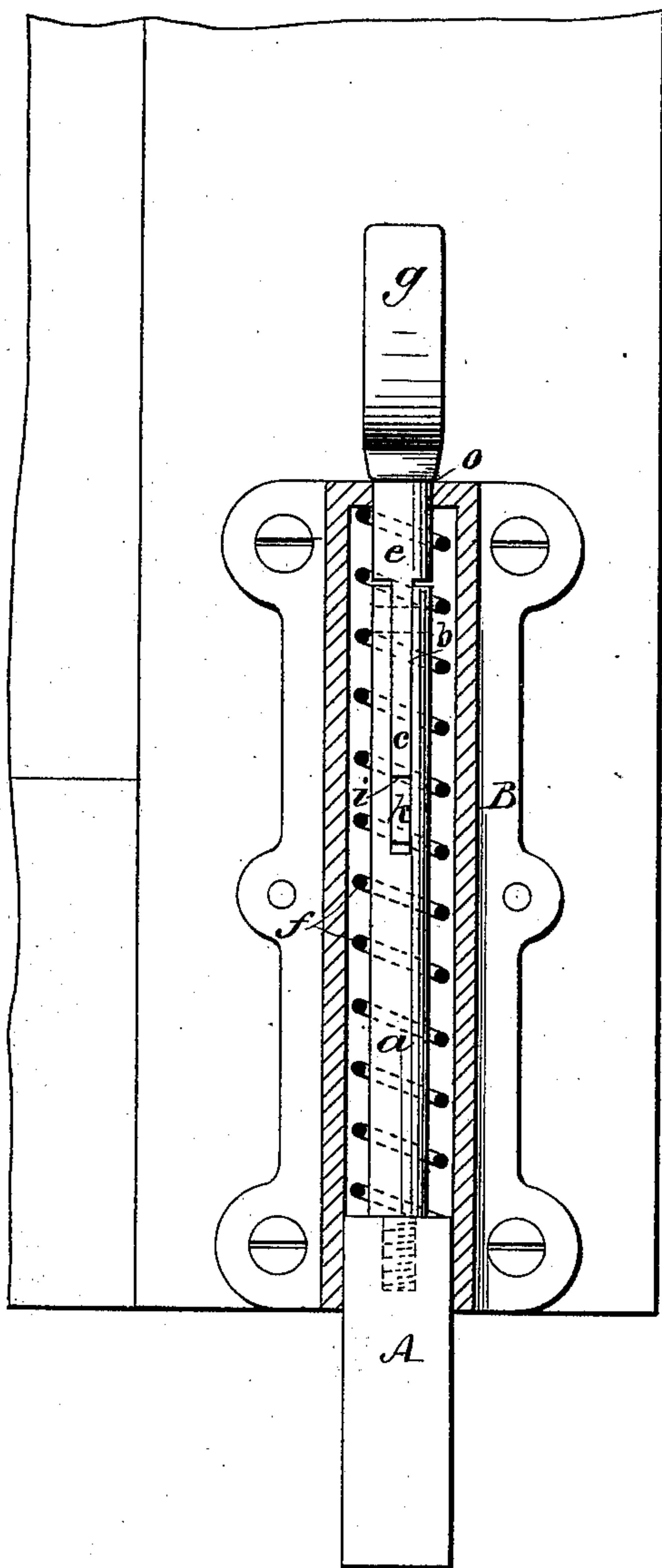


Fig. 2.

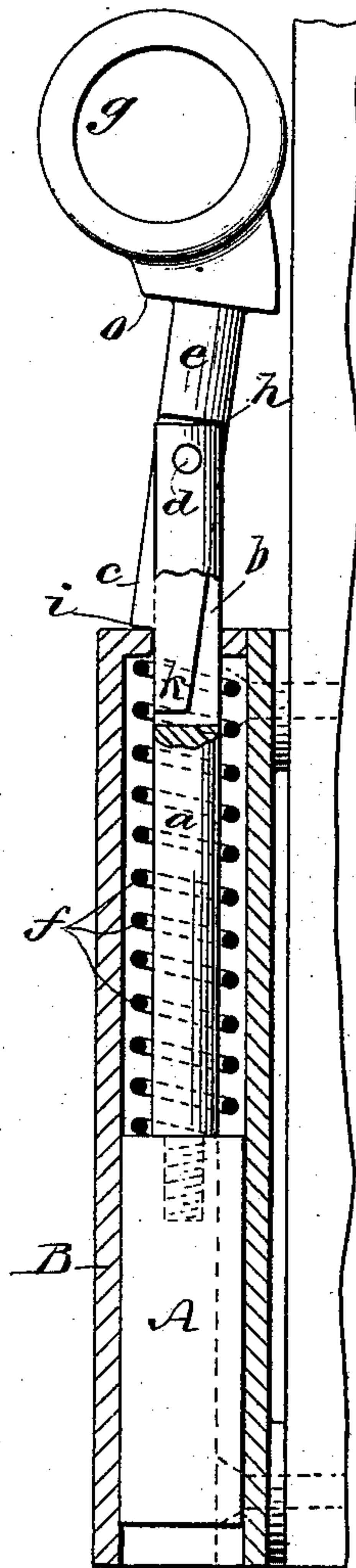
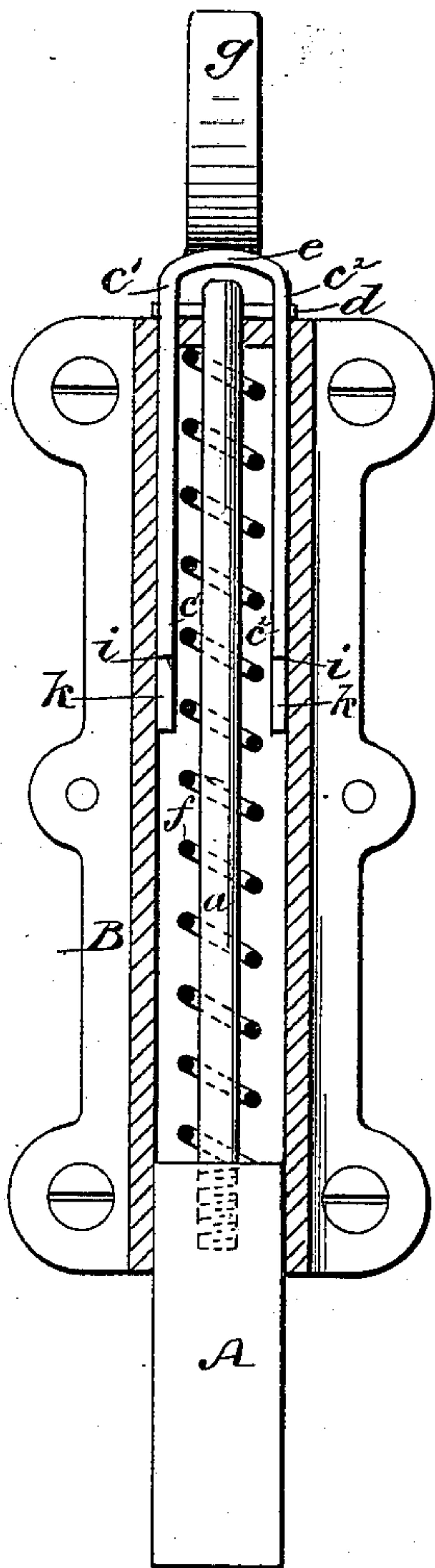


Fig. 4.

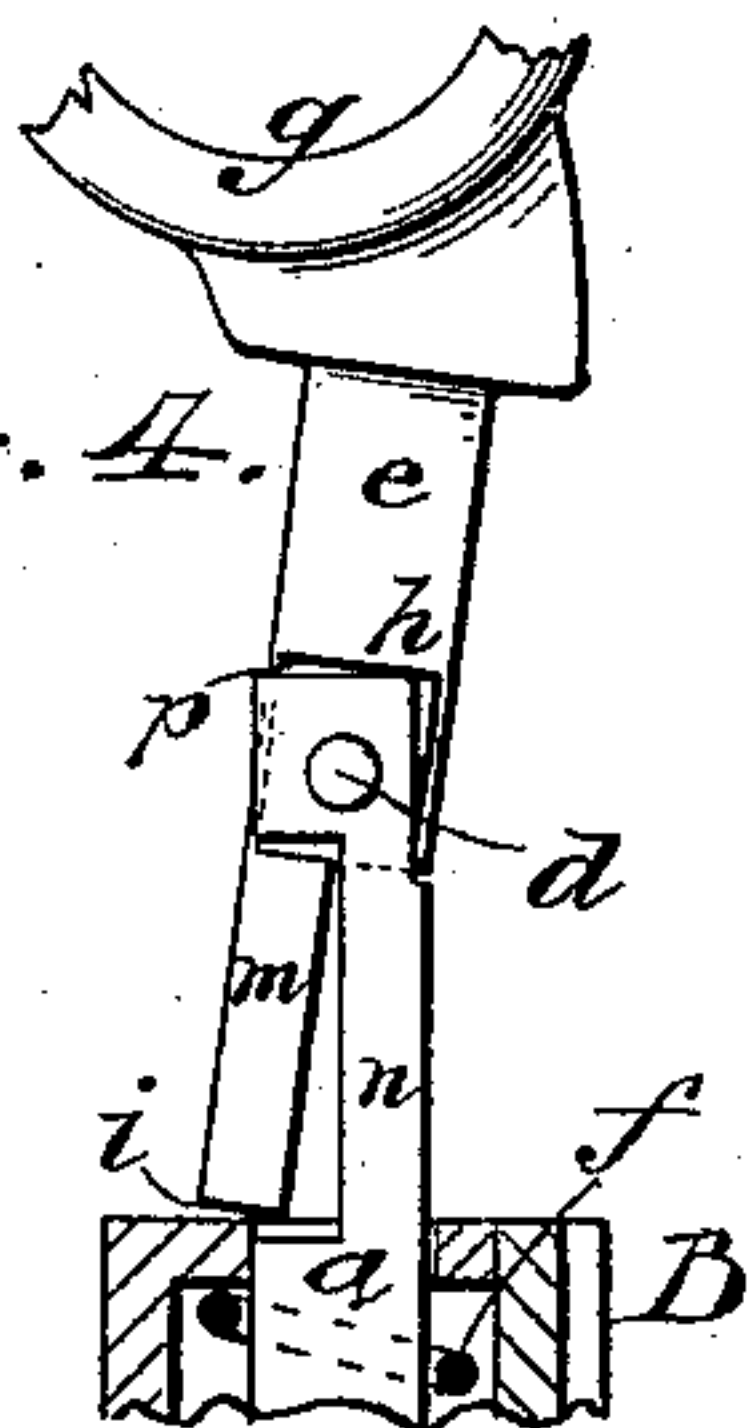
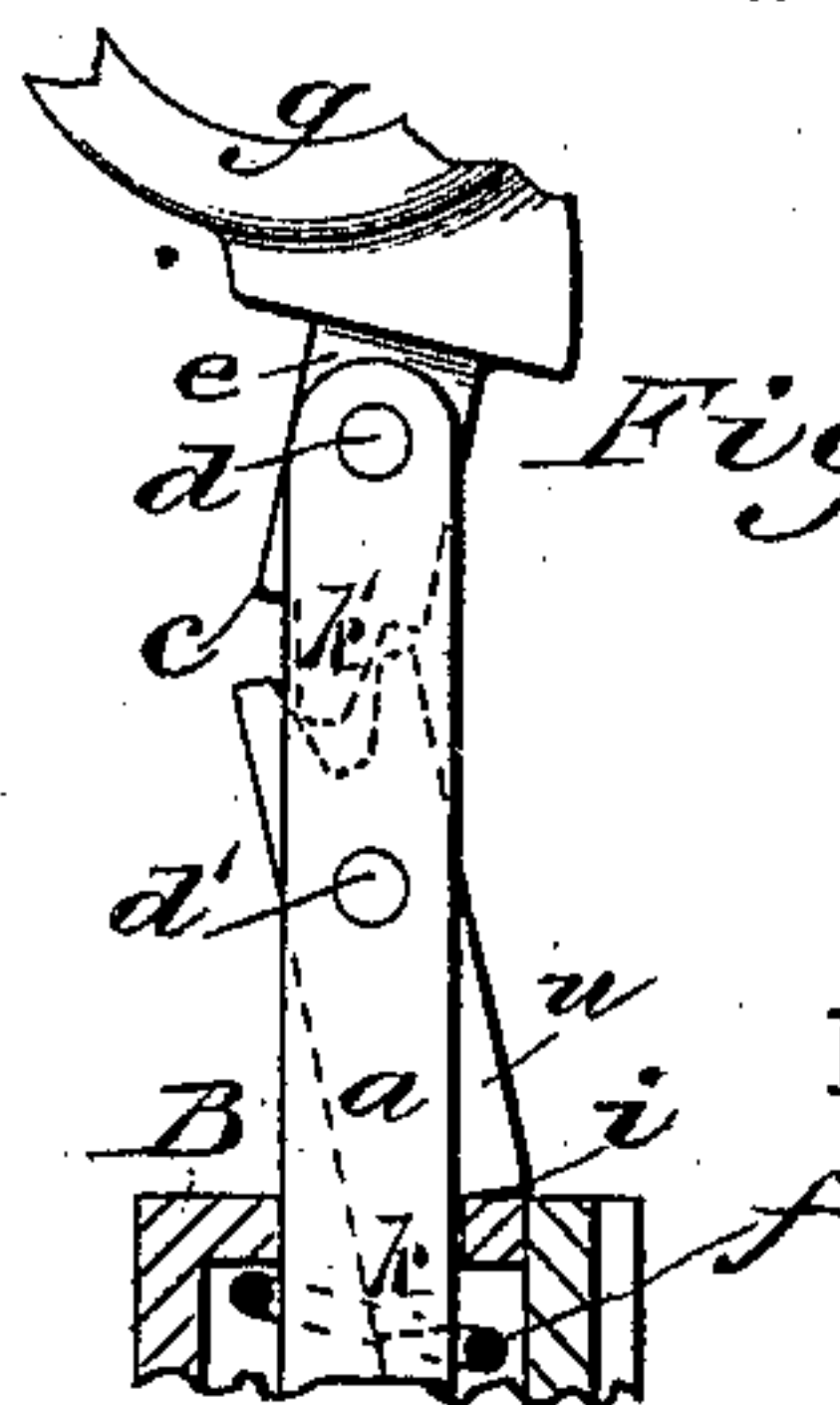


Fig. 5.



WITNESSES:

John H. Deemer

W. Sedgwick

INVENTOR:

J. A. Coultaus

BY *Munn & Co*

ATTORNEYS.

UNITED STATES PATENT OFFICE.

JOSEPH A. COULTAUS, OF BROOKLYN, NEW YORK, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, TO HIMSELF, WILLIAM H. ROLLINS, OF PORTSMOUTH, NEW HAMPSHIRE, AND ALICE W. ROLLINS, OF BROOKLYN, N. Y.

MANIPULATING-ROD FOR BOLTS, &c.

SPECIFICATION forming part of Letters Patent No. 357,116, dated February 1, 1887.

Application filed September 28, 1885. Serial No. 178,488. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH A. COULTAUS, of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Manipulating-Rod for Bolts and other Purposes, of which the following is a full, clear, and exact description.

My invention relates to the construction of a jointed manipulating-rod designed more especially for use in connection with a bolt, but which may be used for other purposes; and the invention consists of a rod formed of pivotally-connected sections, one of which has a shoulder or bearing portion arranged to be thrown against a stop, such as the casing of the bolt, to hold the rod and the device attached thereto in a retracted position.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a view of the rod as it appears when applied to an ordinary form of spring-bolt, the bolt-case being cut away to disclose the interior construction. Fig. 2 is a similar view of a modified construction. Fig. 3 is a side view of the construction shown in Fig. 1, representing the bolt in the retracted position; and Figs. 4 and 5 represent modified constructions of the manipulating-rod.

In Figs. 1 and 3 I have represented my preferred form of rod and bolt, and in this case the lower section, *a*, is formed with a longitudinal slot, *b*, which extends downward a short distance from the upper end of the section, while the upper section, *e*, is formed with a projection, *c*, which is arranged to fit within the slot *b*, the parts being held together by a pivot, *d*, as clearly shown. The lower section, *a*, is screwed into a socket formed in the upper end of the bolt A, or the parts could be connected in any other convenient way. This bolt A is mounted within a casing, B, in the upper end of which there is an aperture, through which the manipulating-rod extends. A spring, *f*, which is coiled about the rod, as clearly shown in the drawings, acts to force the bolt to the position shown in Figs. 1 and 2. The projecting end of the manipulating-rod is formed with a ring or eye, *g*, and when

it is desired to retract the bolt this ring or knob is drawn in against the tension of the spring *f* until the lower end of the projection *c* is above the top of the casing, so that when the ring is thrown back to the position shown in Fig. 3 and the force relaxed the shoulder *i* will bear or rest upon the top of the casing, as shown, and will be so held until released. This releasing of the parts is accomplished by slightly raising the rod carrying the eye or ring *g* forward, to free the shoulder or surface *i* from engagement with the top of the casing, and when the two sections of the rod are in line the tension of the spring will cause a downward movement of the bolt and rod, thus forcing out the bolt, the movement of the parts, however, being limited by a shoulder, *o*, formed on the section *e*. When there is no outside object—such as the door to which the bolt is attached—to limit the side throw of the section *e*, it becomes necessary to provide the device itself with some form of stop, and to this end I here form the upper end of the section *a* square, to abut against the square shoulder *h* of the section *e*, or I form the section *e* with a lug or projection, *k*, below its bearing-surface *i*, so that when the upper end of the section *e* is thrown back its motion will be checked by the meeting of the top of the section *a* and the shoulder *h*, or by the striking of the projection *k* against the top of the casing B.

In Fig. 2 I illustrate a construction wherein the section *a* is not slotted and projects above the top of the casing B. In this case the section *e* is formed with two downwardly-projecting arms, *c' c''*, which pass into the casing through apertures formed in either side of the central opening, through which the section *a* projects. The pivot *d* is arranged above the casing and acts as the stop to limit the downward motion of the bolt. Both of the arms *c' c''* are formed with projections K and bearing surfaces or shoulders *i* above such projections, so that as the bolt is retracted against the pressure of the spring *f* and the ring *g* thrown back to bring the surfaces *i* over the top of the case the backward throw of said ring will be limited by the projection or lug K.

In Fig. 4 the extreme upper end of the section *a* is slotted, and below said slot and in a

line at right angles thereto one-half of the rod is cut away to form a notch, *n*, while one-half of the lower end of the section *e* is cut away at *m* for a distance about equal to the length 5 of the notch *n*. Above the cut *m* the section *e* is cut away on both sides in lines at right angles to the cut *m* to leave a central web, *p*, which fits within the slot formed in the upper end of the section *a*, the pivot *d* being passed 10 through the upper end of the section *a* and the web *p*. In this case the shoulder *h* acts as the stop to limit the throw of the section *e*. The operation of the parts is clearly indicated in the figures.

15 In Fig. 5 the upper section, *e*, is formed with a central lug, *k'*, on the lower end of the projection *c*, and this lug *k'* rides loosely in a notch formed in the upper end of an intermediate plate, *u*, pivoted within the slot in the upper 20 end of the section *a* by a pivot, *d'*, the plate *u* being formed with the bearing-surface *i* and lug *k*. In this case, when the rod is drawn up to retract the bolt A and thrown back, as shown, the lug *k'* will force the upper end of 25 the plate *u* forward, and consequently the lower end of the plate will move backward, so that the surface *i* will project over the top of the casing B, the throw of the parts being limited by the lug *k*.

30 Although I have described the bolt as being forced outward by a spring, it will of course be understood that under certain circumstances the weight of the bolt would be sufficient to hold it in the extended position.

Having thus fully described my invention, 35 what I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with a bolt, of a manipulating-rod consisting of sections *a* and *e*, united by a pivot, *d*, the section *a* being formed 40 with a slot in its upper end and the section *e* with a projection, *c*, fitted within said slot and formed with a lug, *k*, substantially as set forth.

2. The combination, with a bolt, of a manipulating-rod consisting of a section, *a*, formed 45 with a longitudinal slot in its upper end, and a section, *e*, formed with a projection, *c*, having a lug, *k*, and a shoulder, *o*, at or near the upper end of the section, the two parts or sections being united by a bolt, *d*, substantially 50 as set forth.

3. The combination, with a bolt, of a manipulating-rod consisting of pivotally-connected sections, one of which sections is provided with a projection, *k*, substantially as de- 55 scribed.

4. The combination, with a bolt, of a manipulating-rod consisting of sections *a* and *e*, united by a pivot, *d*, the section *a* being formed with a slot in its upper end and the section *e* 60 with a projection, *c*, fitted within said slot, an eye or ring, *g*, being formed on the upper end of the section *e*, substantially as described.

JOSEPH A. COULTAUS.

Witnesses:

EDWARD KENT, Jr.,
C. SEDGWICK.