

(No Model.)

J. G. SPEAR.

ROD JOINT.

No. 389,335.

Patented Sept. 11, 1888.

Fig. 1.

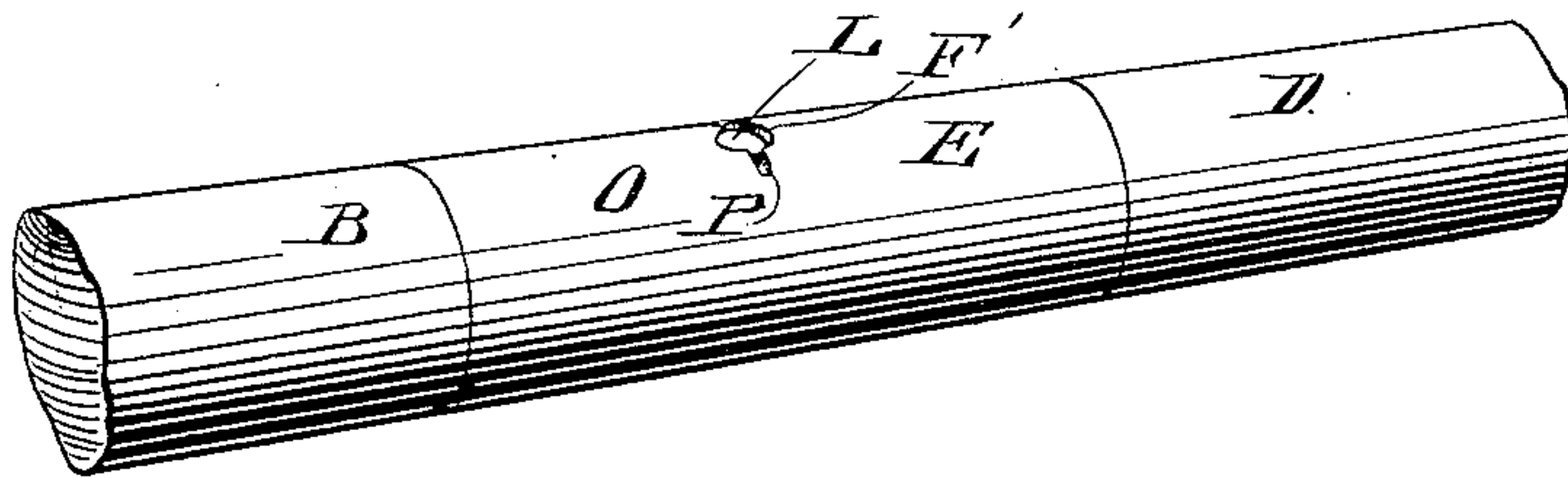


Fig. 2.

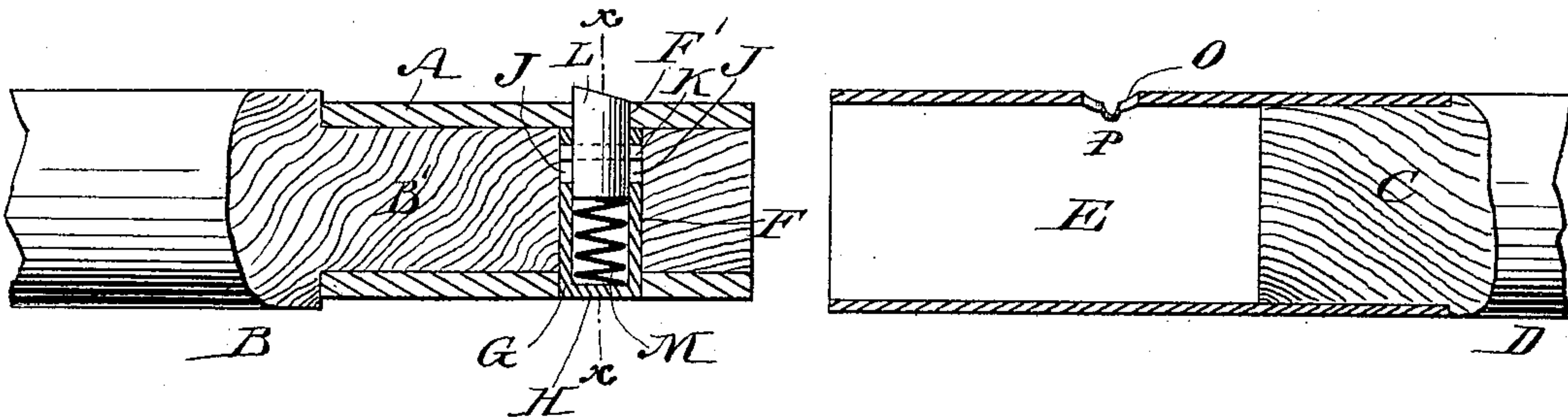
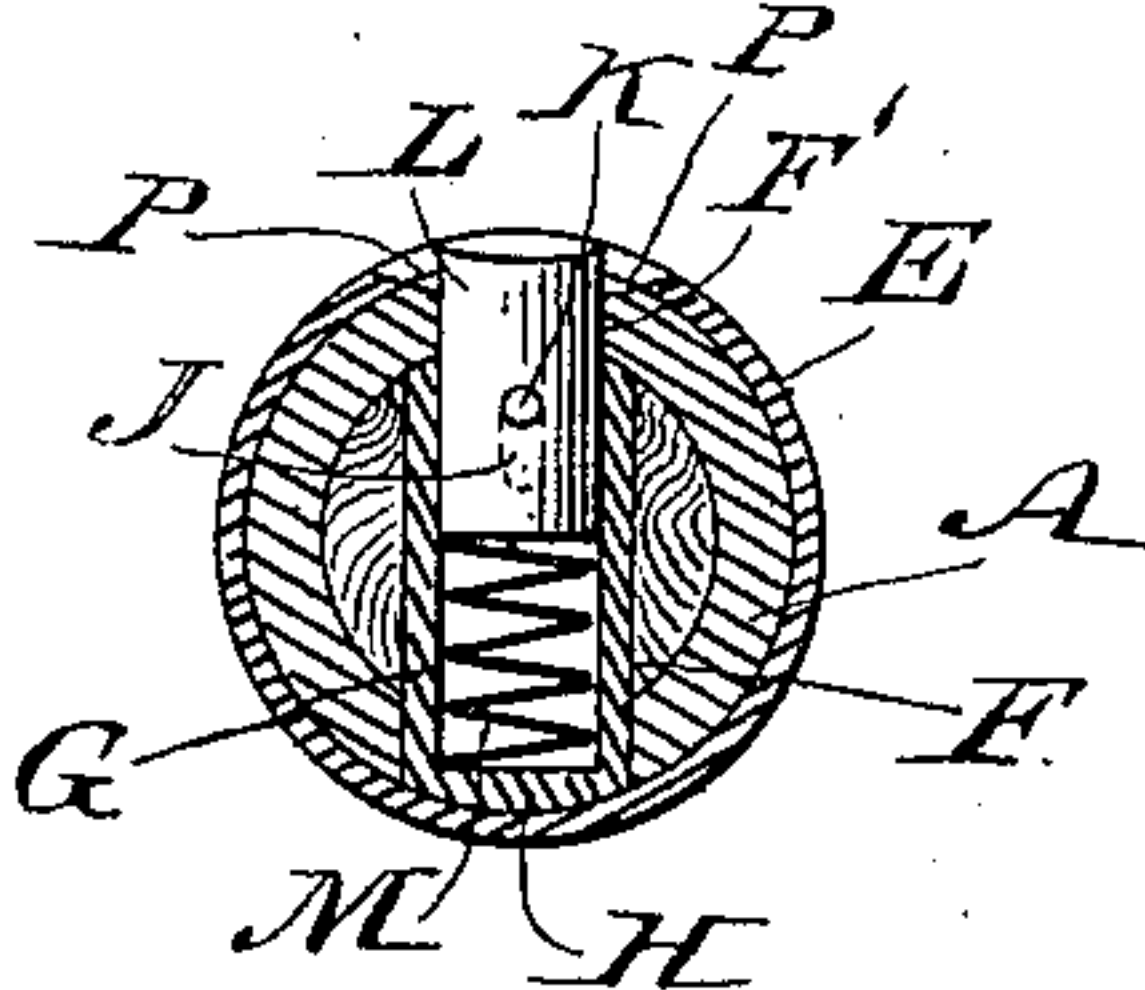


Fig. 3.



WITNESSES:

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JOHN G. SPEAR, OF WEST WINSTED, CONNECTICUT.

ROD-JOINT.

SPECIFICATION forming part of Letters Patent No. 389,335, dated September 11, 1888.

Application filed March 3, 1888. Serial No. 266,031. (No model.)

To all whom it may concern:

Be it known that I, JOHN G. SPEAR, of West Winsted, in the county of Litchfield and State of Connecticut, have invented a new and useful Improvement in Rod-Joints, of which the following is a full, clear, and exact description.

This invention relates to an improvement in joints for coupling the sections of gun-rods and the like, in which one rod section is provided with a transversely-sliding spring-bolt and the adjoining section with a sleeve adapted to slip over the end of the first section and having a bolt-hole to engage the bolt therein, so as to lock the sections together.

The main objects of this improvement are to simplify and strengthen the mounting of the spring-bolt in the rod section and to facilitate the disengagement of the bolt from the hole in the sleeve on the other section; and to this end the invention consists of a certain novel construction and combination of details, hereinafter fully described and distinctly claimed.

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 perspective view of a rod-joint embodying my improvement. Fig. 2 is an enlarged longitudinal sectional view showing the rod-sections unjointed. Fig. 3 is a cross-sectional view on the line *x x*, Fig. 2.

In carrying my invention into effect a tubular metallic ferrule, A, is fitted tightly over the reduced end B' of one rod-section, B, so that the outer ends of the ferrule A and end B' will coincide, and on the short neck C of the other rod-section, D, is received the inner portion of a metallic sleeve, E, the projecting outer portion of which is adapted to slip over the ferrule A, all in a well-known manner. A round hole, F, is drilled transversely from one side through the ferrule A and inclosed rod-end B', of a uniform bore until the opposite side of the ferrule is reached, through which is continued the hole F', of somewhat less diameter.

In the hole F, from the larger end thereof, is driven a tube, G, of corresponding diameter and of such a length that when in place its outer end, which has a head, H, will be flush

with the outer surface of the ferrule, with which it is curved to correspond, and its inner end, which is open, will abut against the interior of the opposite side of the ferrule around the reduced hole therein, with which the bore of the tube is adapted to register. The tube G is formed near its open end with opposite longitudinal slots J, in which ride the ends of a pin, K, passed transversely through a round bolt, L, which is fitted to slide lengthwise, while thus held from turning, in the tube G. The outer end of the bolt L, which is beveled inward toward the outer end of the ferrule A, is held normally projected from the hole F' by a spring, M, which is interposed in the tube between the inner end of the bolt and the tube-head H. The sleeve E on the adjoining rod-section is formed with a hole, O, adapted to receive the end of the spring-bolt L when it is slipped over the ferrule A, and on diametrically-opposite sides of the hole O are formed transverse slots or recesses P, to accommodate the thumb-nail when the same is used to depress the bolt from the hole O in unjointing the rod. With this construction the tube, besides its function just described, serves also as a strong rivet to hold the ferrule A securely on the end B'.

I am aware that a spring-pressed bolt working in a lateral opening of an umbrella-stick has been employed for retaining the runner, and I therefore do not claim such invention.

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

1. In a rod-joint, the combination of the section B of a rod, having the reduced and apertured end B', the ferrule A on the reduced end of the section B and provided with apertures on opposite sides of unequal diameter, the headed tube G in the aperture of the reduced end B', with its head flush with the outer surface of the ferrule, and a spring-pressed and sliding bolt, L, in the tube and having its end projecting through the smaller aperture of the ferrule with the section D of the rod and the sleeve E, secured to the said section and provided with an aperture to receive the bolt G when the sleeve is slipped over the ferrule A, substantially as described.

2. In a rod-joint, the combination of the
section B of the rod, having the reduced and
apertured end B', the ferrule A on the reduced
end B' and provided with apertures of unequal
5 diameter on opposite sides, the headed tube
G, provided with the slots J and fitted in the
aperture of the reduced end B', with its head
flush with the outer surface of the ferrule, the
bolt L, having beveled end and provided with
10 pins K, working in the slots of the tube, and

the spring M in the tube with the section D,
the sleeve E, secured to the said section and
provided with aperture O, and the transverse
slots or recesses P, substantially as herein
shown and described.

JOHN G. SPEAR.

Witnesses:

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