(No Model.)

N. C. PERRY & G. S. GLADDING.

DEVICE FOR LOCKING THE ENDS OF A JOINTED ROD.

No. 346,605. Patented Aug. 3, 1886.

Fig. 2.

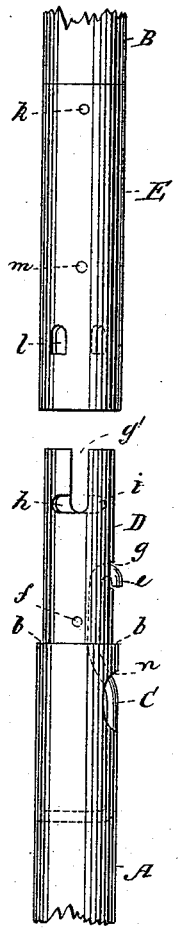


Fig. 1.

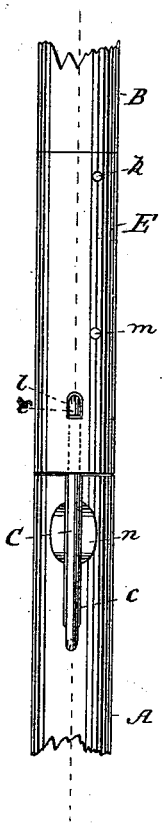
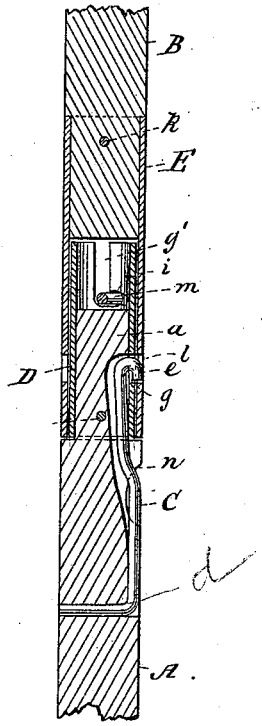


Fig. 3.



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UNITED STATES PATENT OFFICE.

NOAH C. PERRY AND GEORGE S. GLADDING, OF CHESTER, CONNECTICUT; SAID PERRY ASSIGNOR TO SAID GLADDING.

DEVICE FOR LOCKING ENDS OF A JOINTED ROD.

SPECIFICATION forming part of Letters Patent No. 346,605, dated August 3, 1886.

Application filed January 5, 1886. Serial No. 187,747. (No model.)

To all whom it may concern:

Be it known that we, NOAH C. PERRY and GEORGE S. GLADDING, citizens of the United States, and residents of Chester, in the county of Middlesex and State of Connecticut, have invented certain new and useful Improvements in Devices for Locking the Ends of a Jointed Rod or Pole, of which the following is a specification.

Our invention relates to an improvement in devices for locking or securing jointed rods or poles, the object being to provide a device of this character which shall be simple and economical in its construction, durable and efficient in use, and so constructed and arranged as to permit the joints or sections to be easily and readily locked or separated.

With such ends in view our invention consists in certain novel features of construction, as will be hereinafter fully described, and specifically pointed out in the claims.

In the accompanying drawings, Figure 1 is a view of the parts or ends of two sections or joints of a rod or pole secured together by means of our improvement. Fig. 2 is a view thereof showing the parts separated, and Fig. 3 is a sectional view.

Referring to the drawings, A B represent parts of two joints or sections of a pole or rod constructed of any material and of any dimensions. The end *a* of the joint A is somewhat reduced in diameter, forming a shoulder, *b*, which end is provided with an elongated slot, *c*, extending along the body of the joint or section a little beyond said shoulder *b*, and adapted to contain a wire spring, C, one end, *d*, of which latter is rigidly secured therein, and the other end thereof provided with a catch, *e*, preferably formed by bending or turning up the end of the wire of which the spring is constructed. The reduced end *a* of the joint or section A has fitted thereon the sleeve or collar D, securely fastened thereto by means of the pin *f*, passing through the body of the joint, said sleeve being formed with a small hole or opening, *g*, through which, and above the outer surface of the collar, projects the catch *e*, formed on the outer or free end of the spring C. The sleeve D, as will be seen by reference to Fig. 3, projects out beyond the end *a* of the joint, and is provided with the slot *g'* in a plane passing through the axis of the joint, from the inner ends of which slot, and at right angles thereto, lead the slots *h i*, formed in the same plane and leading in the same direction. The adjacent end of the section B is provided with a metallic sleeve, E, secured thereto by means of the pin *k*, the end of said section being slightly reduced in diameter to allow the outer surface of the sleeve E to rest flush with that of the section or joint for the purpose of giving the rod a neat and finished appearance and imparting thereto an even surface. The sleeve E is formed with a small opening or openings, *l*, for the admission of the catch *e*, and has passing diametrically through it the pin *m*.

When it is desired to lock the two sections together, the end of the section A is first inserted in the sleeve E, and then turned until the pin *m* registers with the slot *g'*, whereupon the section A is then pushed inwardly until the pin *m* strikes the inner end of said slot, at which time the shoulder *b* will strike the outer end of the sleeve E. The sections are then turned or revolved in opposite directions, the pin *m* traveling or moving in the slots *h i* until it strikes the ends thereof, whereupon the catch *e*, formed on the end of the spring C, will enter the opening *l* and securely lock the two sections together.

When desired to separate the two parts, the spring is depressed, the depression being formed in the rod for that purpose, until the end thereof is disengaged from the sleeve E, and the two sections then turned until the pin *m* is opposite the slot *g'*, when the two parts can be easily pulled apart.

If desired, the sleeve D may be omitted entirely, the end of the spring entering the opening *g'* when the two sections are brought together in their proper relations to each other, and securing them against all danger of separation.

Our device is exceedingly simple in its construction and arrangement of parts, is effective and certain in its operations, easily manipulated, and can be applied or attached to the sections of any rod or pole at a small cost.

What we claim as our invention, and desire to secure by Letters Patent, is—

1. A device for locking together the ends of a jointed rod or pole, which consists of a sleeve secured to the end of one section and adapted to receive the end of another section, said sleeve being provided with a small opening or openings, and a spring, one end of which is secured in a slot formed in the second section, and provided on its end with a catch adapted to engage in said hole or opening, substantially as set forth.

2. A device for locking together the ends of a sectional pole or rod, which consists in a sleeve secured to the end of one section and provided with an opening or openings, and having a pin passing through it, a slotted sleeve secured to the end of the second section, and adapted to enter said former sleeve and engage with said pin, and a spring, one end of which is secured to the second section, and having its other end provided with a catch adapted to engage with said opening, substantially as set forth.

3. A device for locking together the ends of a jointed pole or rod, which consists of a sleeve secured to the end of one section and adapted to receive the end of the second section, said sleeve being provided with an opening and having a pin passing through it, a sleeve secured to the end of the second section and provided with slots for the engagement of said pin, and a spring secured at one end in a slot formed in the second section, and having its opposite end provided with a catch projecting through an opening in the slotted sleeve and adapted to engage in said former opening, substantially as set forth.

4. A device for locking together the ends of a jointed rod or pole, which consists of the sleeve E, secured to the end of one section and provided with an opening, *l*, and the spring C, provided with the catch *e*, adapted to engage in said opening *l*, substantially as set forth.

5. A device for locking together the ends of a jointed rod or pole, which consists of the sleeve E, provided with the opening *l* and pin *m*, the sleeve D, provided with slots *g' h i*, for engagement with the pin *m*, and the spring C, provided with a catch, *e*, adapted to engage in the opening *l*, substantially as set forth.

Signed at New York, in the county of New York and State of New York, this 15th day of October, A. D. 1885.

NOAH C. PERRY.
GEORGE S. GLADDING.

Witnesses:
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ARTHUR E. HENTHORN.