

(No Model.)

W. W. NEVEGOLD.

COUPLING RETAINER.

No. 270,462.

Patented Jan. 9, 1883.

FIG. 1.

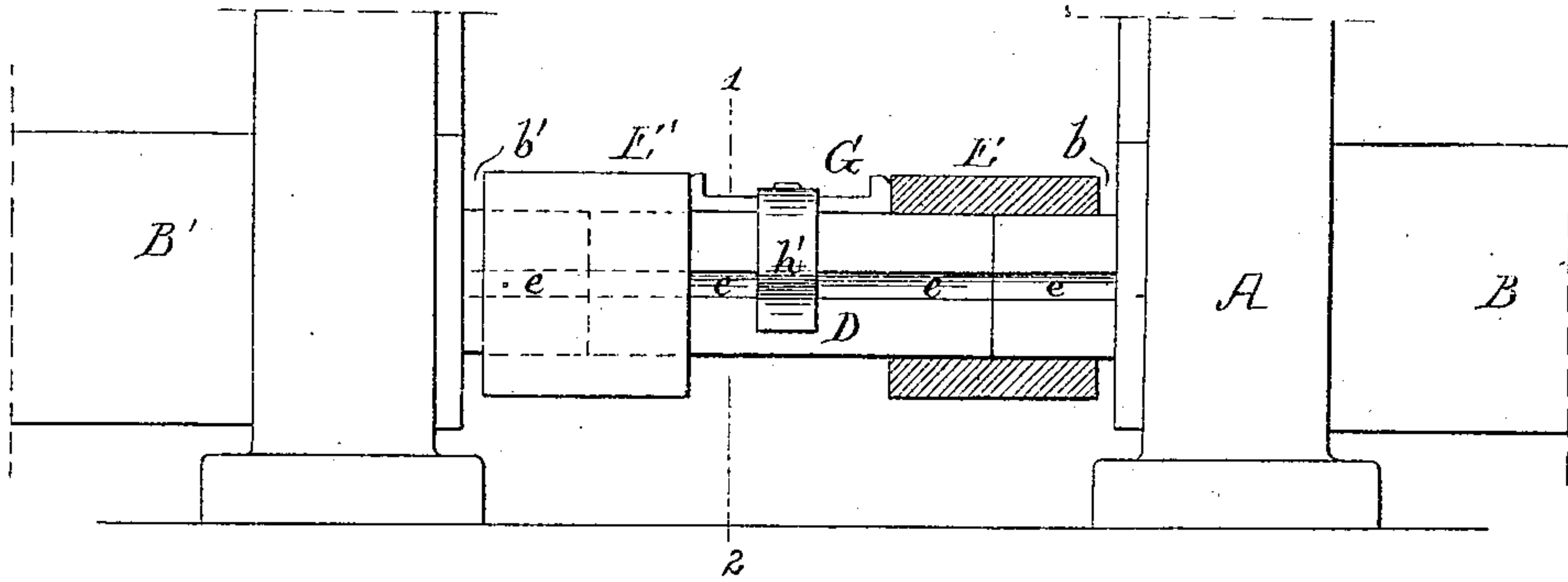


FIG. 2.

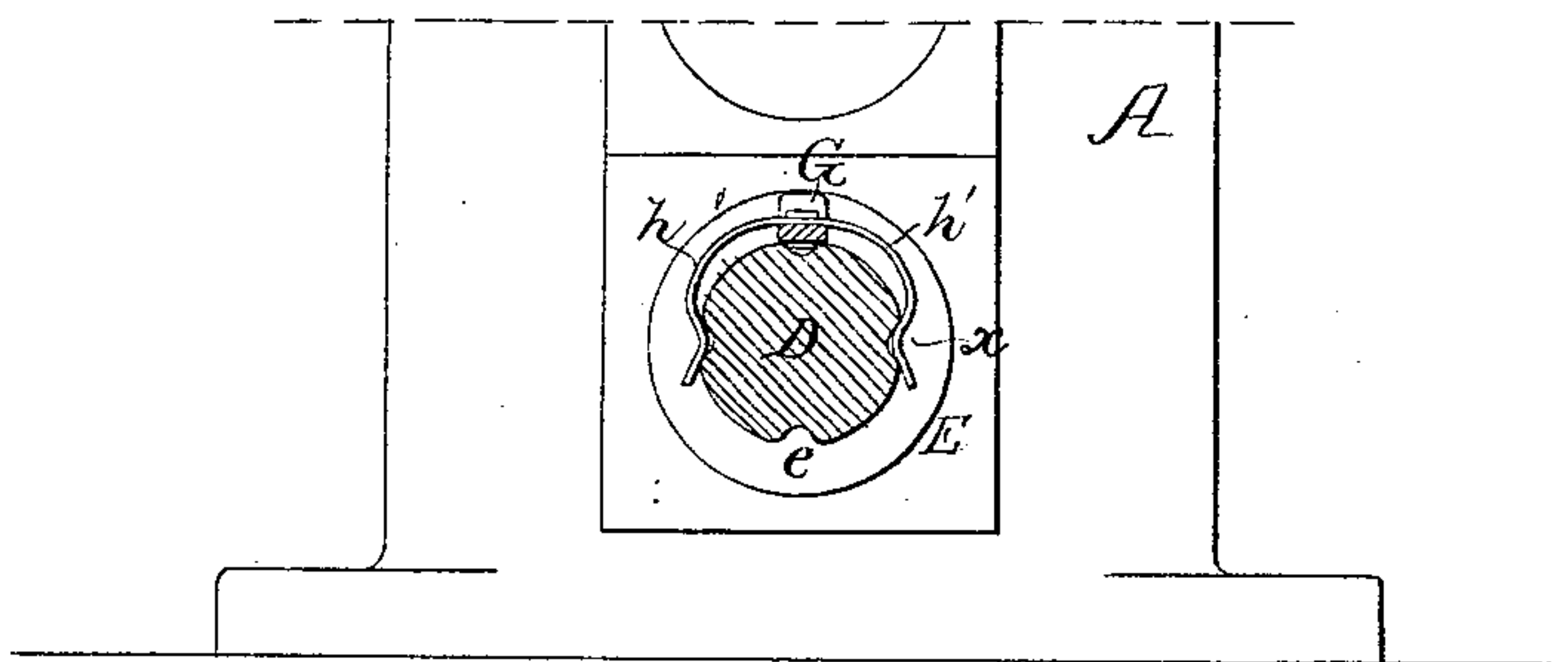
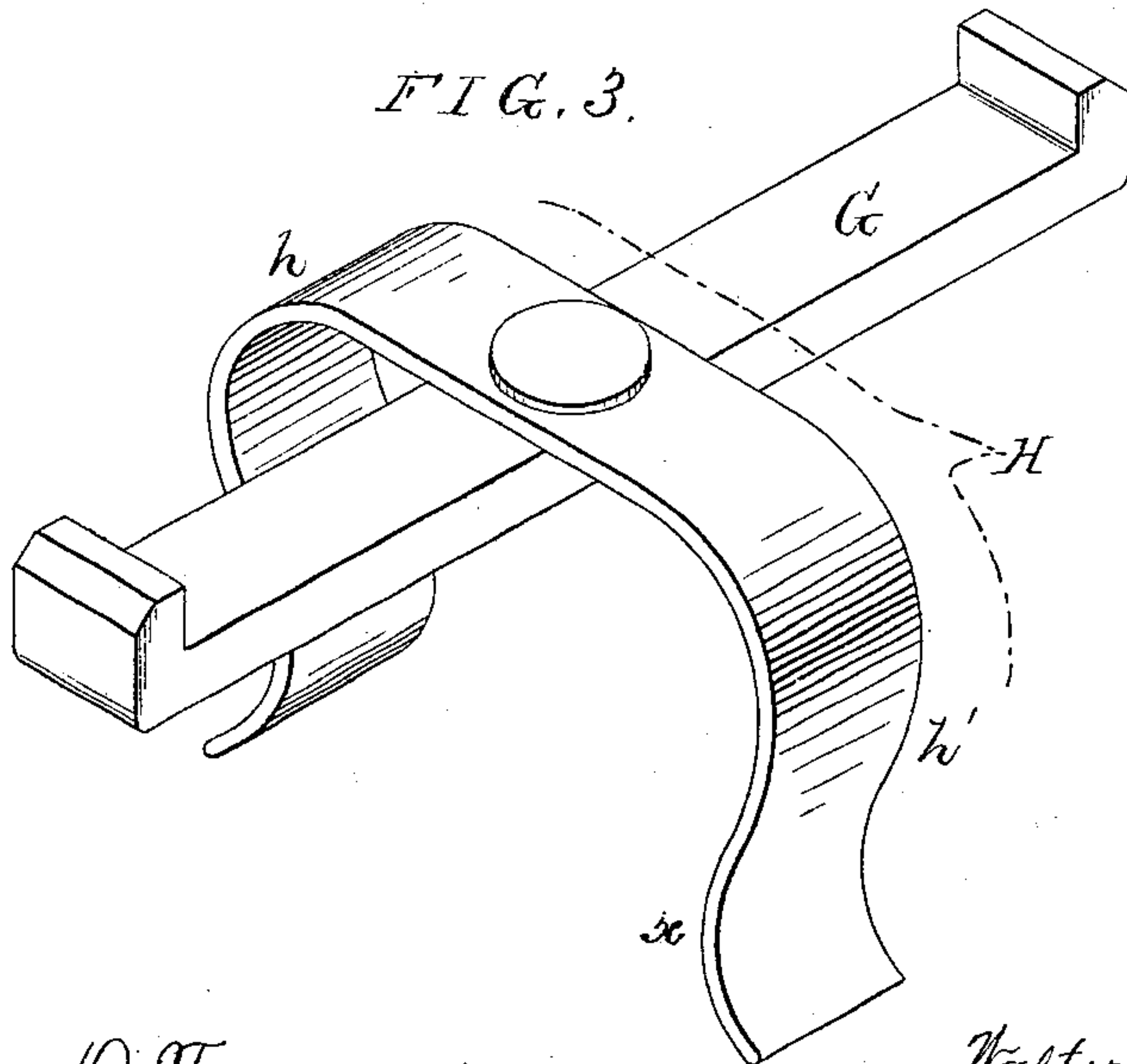


FIG. 3.



Witnesses:  
Hamilton D. Turner  
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Walter W. Nevegold  
By his Attorneys  
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# UNITED STATES PATENT OFFICE.

WALTER W. NEVEGOLD, OF BRISTOL, PENNSYLVANIA.

## COUPLING-RETAINER.

SPECIFICATION forming part of Letters Patent No. 270,462, dated January 9, 1883.

Application filed June 13, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, WALTER W. NEVEGOLD, a citizen of the United States, and a resident of Bristol, Bucks county, Pennsylvania, have invented an Improvement in Coupling-Retainers, of which the following is a specification.

My invention consists of a device, fully described hereinafter, for retaining in place the two couplings by which, and by an intermediate spindle, a roll of one set is connected to that of another set of rolls in a train, the object of my invention being to obviate the necessity of resorting to the appliances which are usually employed for this purpose, and the removal and replacing of which require tedious manipulation.

In the accompanying drawings, Figure 1 is a front view, partly in section, of part of a rolling-mill train with spindle, couplings, and my improved retainer; Fig. 2, a transverse section on the line 1 2, and Fig. 3 a perspective view of the retainer drawn to an enlarged scale.

A represents part of one of the housings of one set of rolls, and B part of one of the rolls, which has the usual projection or wabblers *b* coupled to a like wabblers, *b'*, on the roll *B'* of an adjoining set by a spindle, *D*, and couplings *E E'*. The projecting ends or wabblers of the rolls, as well as the spindle *D*, have the usual four grooves, *e*, as shown in Fig. 2, for receiving the like number of internal ribs in the couplings. As these couplings are always loose on the intermediate spindle and on the wabblers of the rolls, they are apt to creep away from the latter on the spindle, and to prevent this it has been the common practice to wrap leather straps, hoop-iron, or thick wire on the spindle between the two couplings, and this must be unwrapped and removed when the rolls of the two sets have to be uncoupled. In order to obviate the necessity of resorting to these retaining-wrappings, I use a bar, *G*, long enough to pass freely between the two couplings *E E'*, and secure to this bar two curved springs, *h h'*, each of which is bent

abruptly at *x*, so that it will engage into one of the grooves of the intermediate spindle *D*. These springs are preferably made of one elastic bar or plate, *H*, secured midway between its opposite ends to the center of the bar *G*, as shown in Fig. 3.

Instead of the two springs *h h'*, a curved rigid arm may take the place of one of the springs; but I prefer the two springs. The two springs will retain the bar *G* in its place, and it will effectually prevent the creeping away of the couplings from the wabblers of the rolls.

Prior to uncoupling the rolls the retainer may be instantly detached by applying such force to one of the springs that its bend *x* shall be dislodged from the groove in the spindle.

An important advantage of my invention is the prevention of the rattling noise which accompanies the use of the ordinary retaining-wrappings.

I claim as my invention—

1. The within-described coupling retainer, the same consisting of the bar *G*, adapted to fit freely between the couplings, and having bent arms *h h'*, one or both being elastic, and one of which is adapted to engage into one groove and the other into another groove of the coupling-spindle, all substantially as set forth.

2. The combination, with the coupling-spindle *D* and couplings *E E'*, of the retaining-bar *G* and its springs *h h'*, constructed to engage into grooves of the said spindle *D*, substantially as set forth.

3. The coupling device in which a bar, *G*, is combined with a bent elastic bar, *H*, forming two springs, *h h'*, substantially as specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WALTER W. NEVEGOLD.

Witnesses:

HARRY DRURY,  
HARRY SMITH.