

(No Model.)

H. E. MACREA.  
FENCE.

No. 406,657.

Patented July 9, 1889.

Fig. 1.

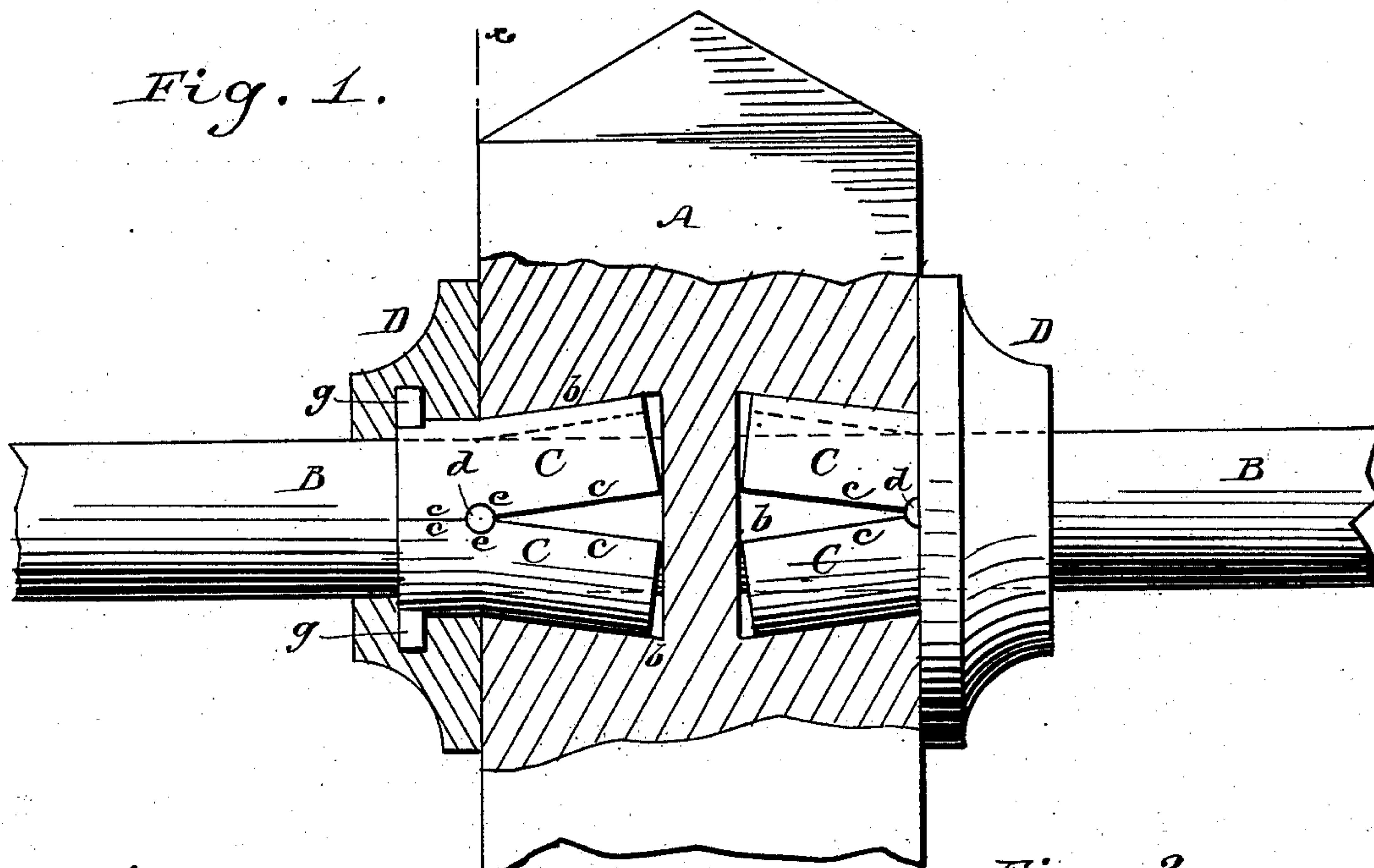


Fig. 3.

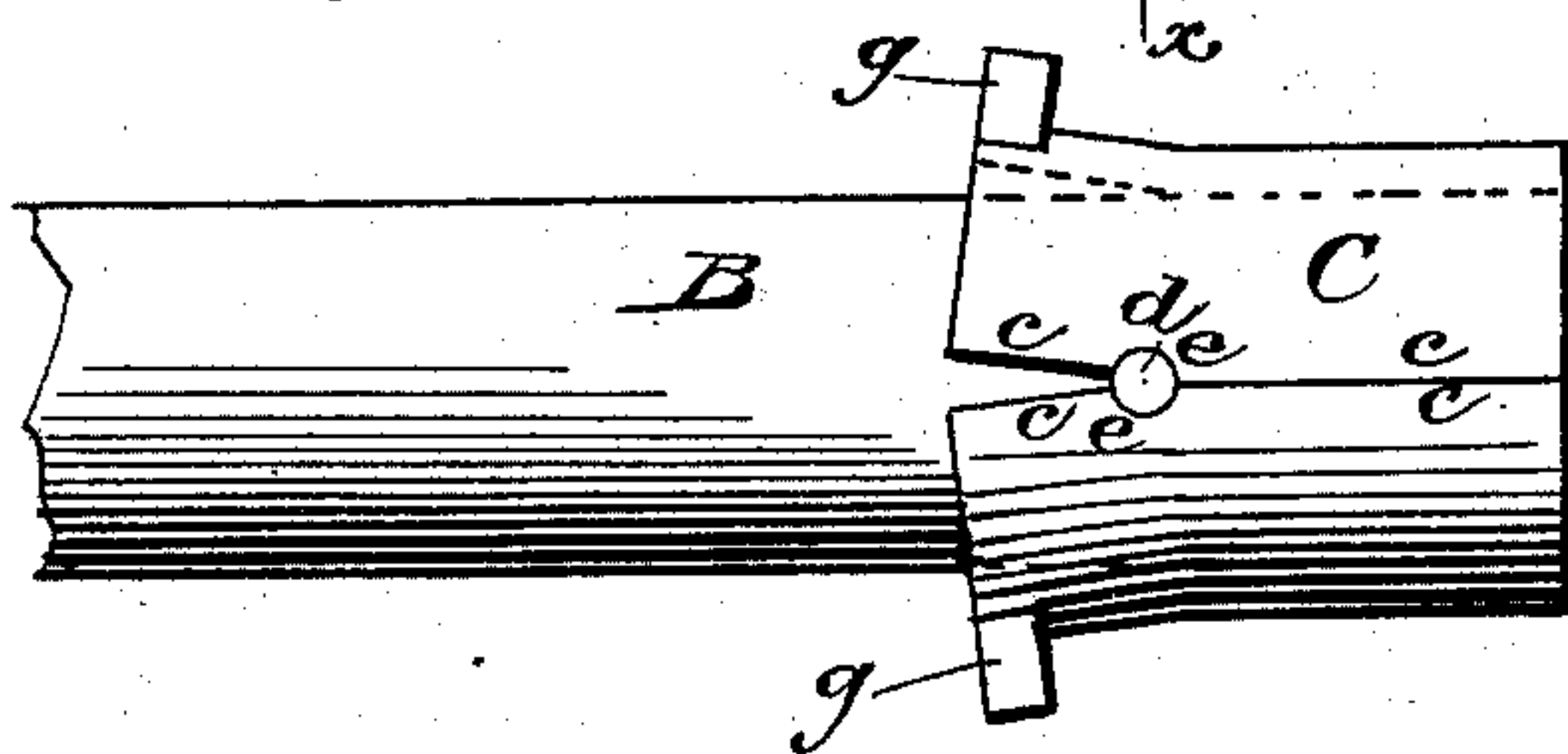


Fig. 2.

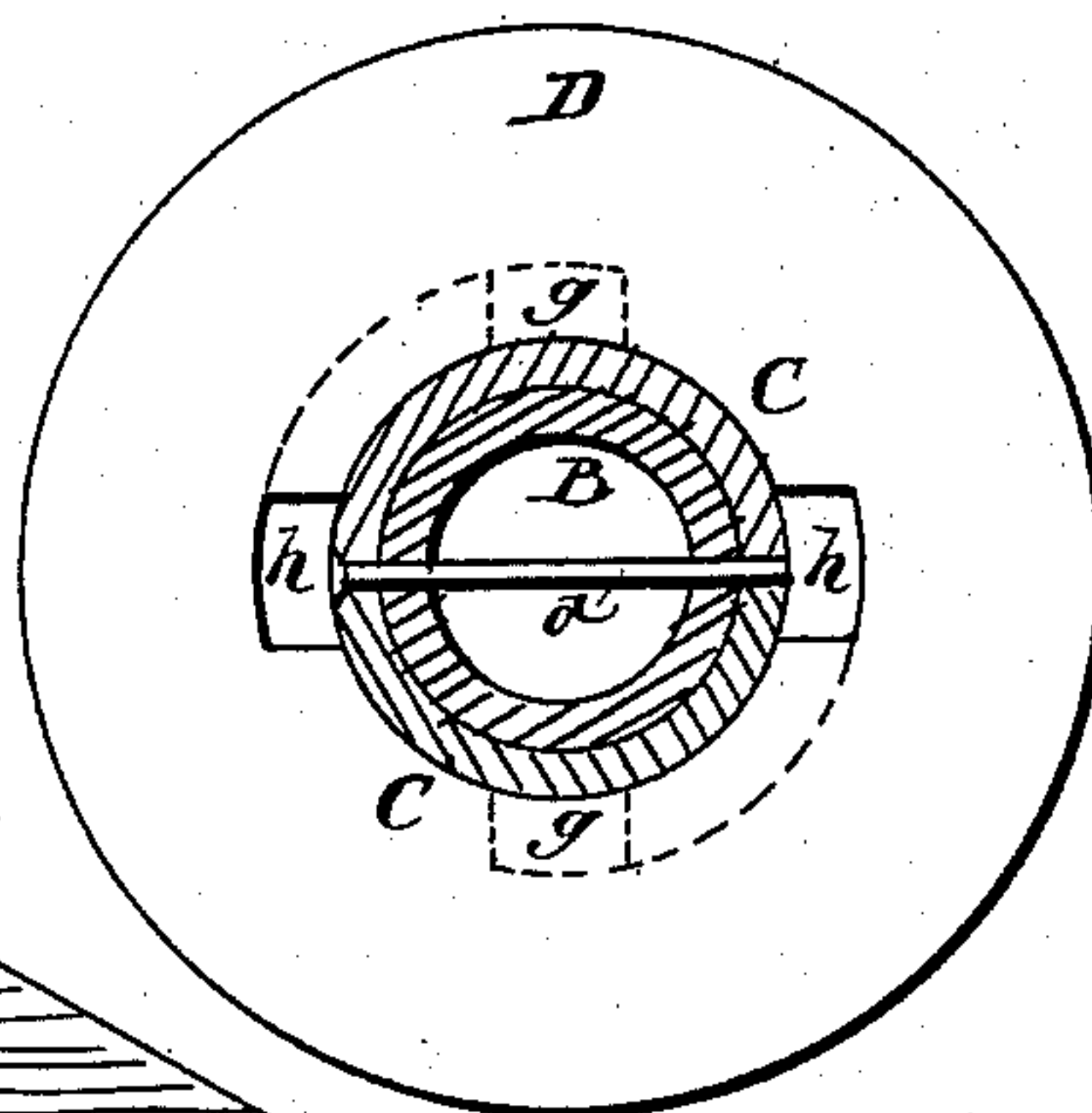
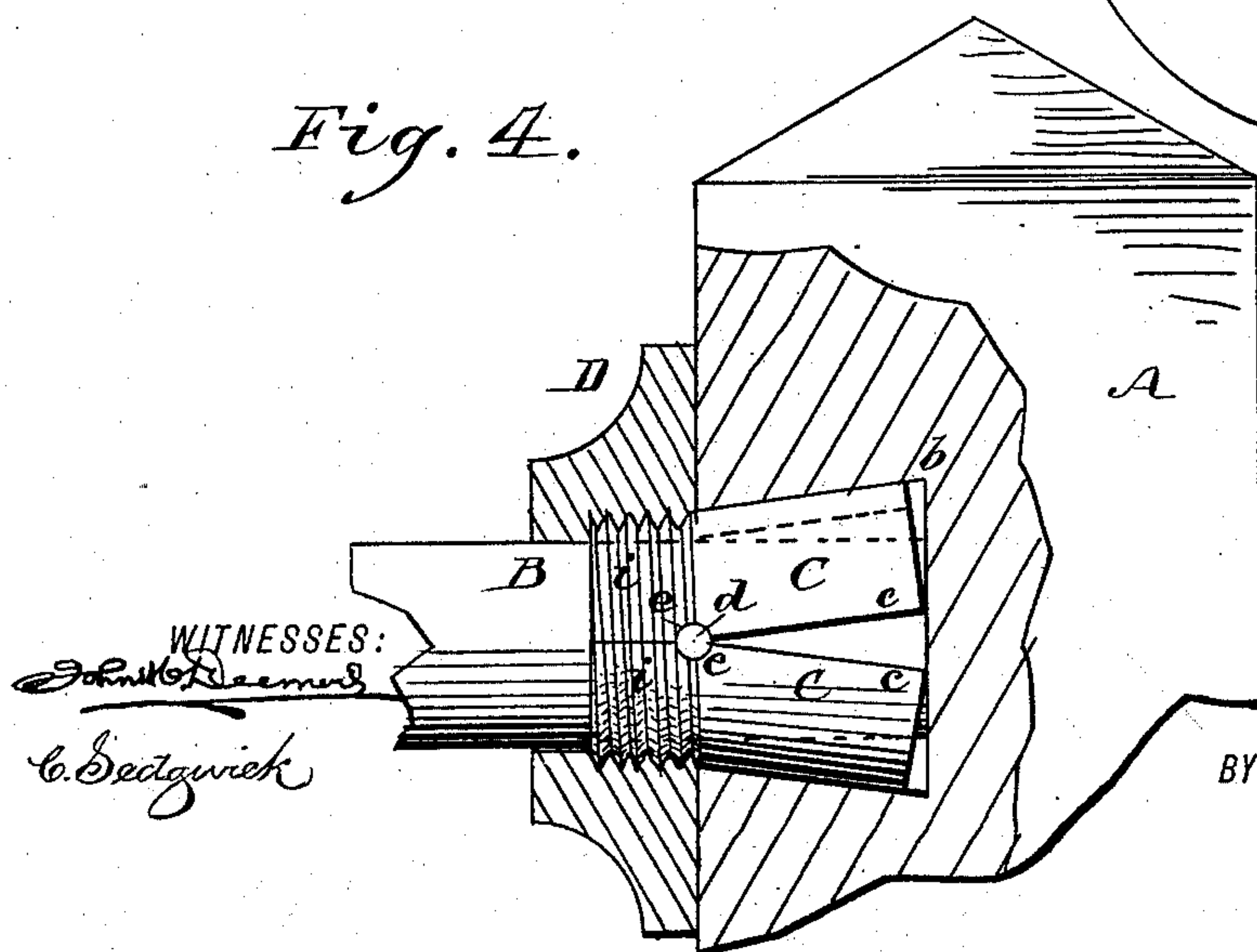


Fig. 4.



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# UNITED STATES PATENT OFFICE.

HENRY E. MACREA, OF HUDSON, NEW YORK.

## FENCE.

SPECIFICATION forming part of Letters Patent No. 406,657, dated July 9, 1889.

Application filed April 4, 1889. Serial No. 305,996. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY E. MACREA, of Hudson, in the county of Columbia and State of New York, have invented a new and useful  
5 Improvement in Cemetery and other Fences, of which the following is a full, clear, and exact description.

My invention relates more particularly to fences which are made up of stone and  
10 metal—as, for instance, stone posts or supports, and metal rods or tubes united therewith. It is more especially intended for cemetery and other like fences, in which a series of stone posts are connected by a series of  
15 horizontal metal rods or tubes, and the invention will here be described accordingly; but it is equally applicable to fences or railings in which metal uprights or rods are secured at their lower ends in stone sills.

20 The invention consists in the novel construction of parts and combination of means for securely uniting the metal portions with the stone or other portions of the structure, substantially as hereinafter described, and  
25 pointed out in the claims.

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.

30 Figure 1 is a broken and partly sectional elevation of a stone post of a cemetery or other like fence, and metal rods or tubes united thereto in accordance with my invention, one of the nuts or flanges used to secure the rods or tubes to the post being in section.  
35 Fig. 2 is a vertical section upon the line  $xx$  in Fig. 1. Fig. 3 is a longitudinal view of one end portion of one of the rods or tubes, with certain means for locking or holding the latter in the post; and Fig. 4 is a partly sectional elevation of a portion of a post and rod or tube with its securing means under a modified form of construction applied.

Referring in the first instance to Figs. 1, 2,  
45 and 3 of the drawings, A indicates a stone post having tapering recesses  $b b$ , made in its opposite sides, of greater area at their bases than at their outer ends. These tapering recesses or sockets are of a circular dovetail  
50 shape, and are designed by the aid of suitable securing means to hold the ends of the metal

rods or tubes B, which are to be united to the post within them. Said sockets are sufficiently large in transverse section not only to receive through their outer and smaller ends 55 the ends of the rods or tubes B, but also first one and then the other of two loosely-fitting half-sleeves C C encircling the rods or tubes, and which combined form a longitudinally-divided bushing, each half of which has its 60 meeting face  $c$  and its interior surface constructed to form obtuse angles longitudinally, so as to admit of said half-sleeves or bushings rocking upon or about a pin or bolt  $d$ , which passes transversely through the rod or 65 tube and engages with notches  $ee$  in the faces  $cc$  of the half-sleeves or bushings C C at a suitable point in the length of the latter, or where the reverse angles of said surfaces meet. These half-sleeves form locking-levers or de- 70 vices for holding the metal rod or tube B to its place within its tapering socket  $b$  in the post upon forcing and bringing together the outer end portions of the two half-sleeves or locking devices C C and holding them there, 75 which will cause the inner end portions of said devices to be spread outward within the tapering sockets  $b$ . This is done by means of a loose flange or nut D, having a cylindrical opening through it, and made to fit the 80 rod or tube B freely; also to receive the outer end portions of the half-sleeves C C, when said portions are shut or brought together. These sleeves are held in such position, either 85 by ears  $g g$  (see Figs. 1, 2, and 3) on the half-sleeves, which are engaged with the flange D by first passing them through openings  $h h$  in said flange, and then, as shown by dotted lines in Fig. 2, turning the latter to establish the lock, or by constructing said flange with 90 an interior screw-thread adapted to engage with screw-threads  $i$  around the outer end portions of the half-sleeves C C, as shown in Fig. 4; or the closing and locking flange D may be otherwise constructed and applied to 95 similarly act upon and hold the rocking locking devices or half-sleeves, the pin or bolt  $d$  keeping them from turning with the nut or flange D.

This forms a very simple and secure as 100 well as ornamental means of uniting the metal rods or tubes with the stone post, and in case



of applying the invention to upright rods or tubes inserted at their lower ends in stone sills, the filling in with molten metal, which is the usual mode of uniting them, is dispensed with.

This invention is also applicable to fences in which the posts or supports are made of metal or other material than stone.

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

1. The combination, with the post or support having a tapering recess increasing in size toward its inner end, of a metal rod or tube fitting loosely at its end within said recess or socket, rocking locking devices connected intermediately of their length to the sides of the entering end portion of the rod or tube, and a closing flange or nut on the rod, arranged to engage with said rocking devices, and operating to spread the inner end por-

tions of the latter within the enlarged portion of the recess or socket in the post or support, substantially as specified

2. The combination of the post or support A, having one or more tapering sockets or recesses *b* in it, increasing in size in an inward direction, the metal rod or tube B, the angularly-constructed half-sleeves or bushings C C, connected, as by a pin or bolt *d*, with and fitted to rock upon said rod, and the closing nut or flange D, applied to said rod or tube and to the outer end portions of the half-sleeves or bushings, and operating to expand the inner end portions of the latter within the tapering socket or recess in the post or support, essentially as shown and described.

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Witnesses:

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