

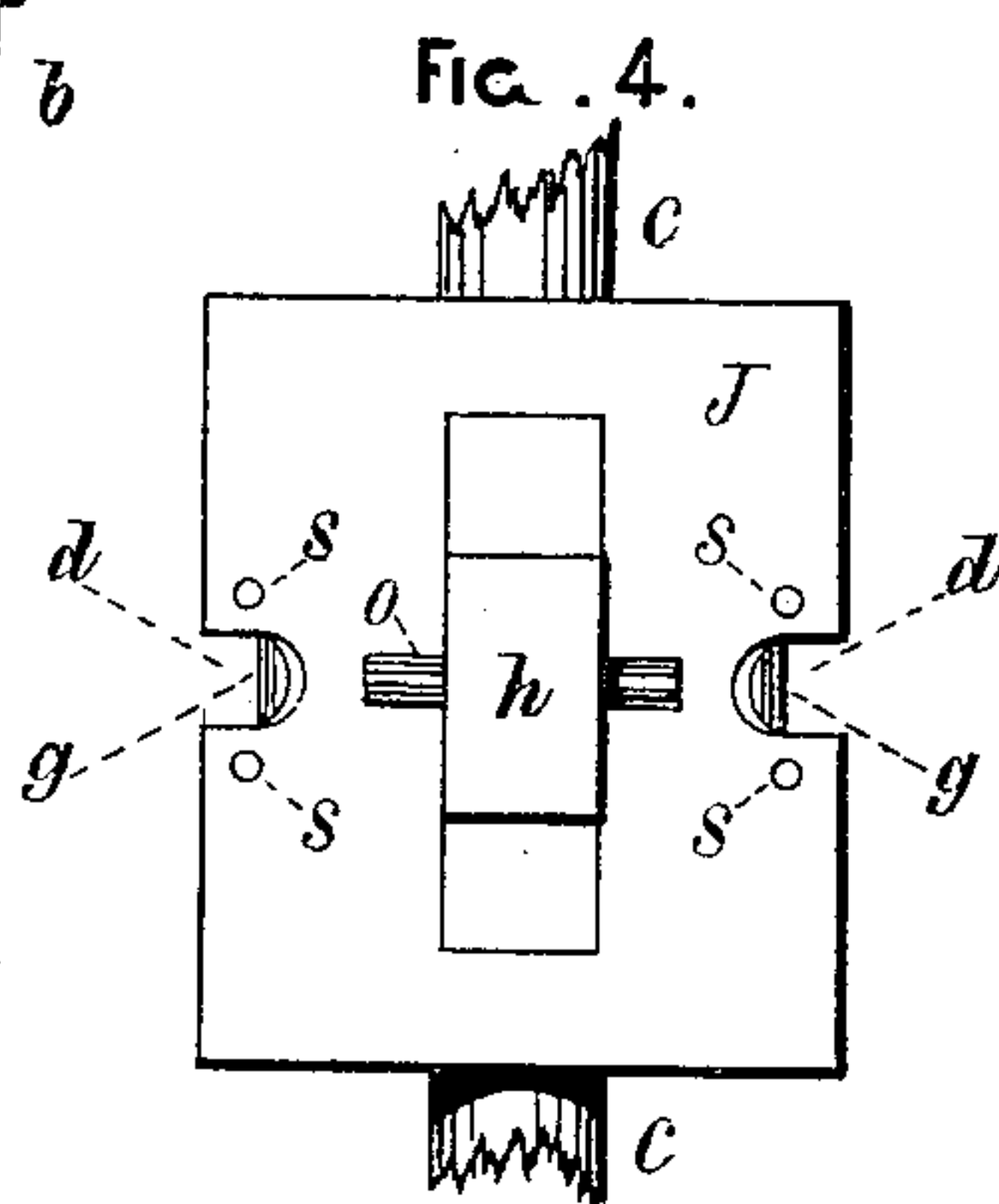
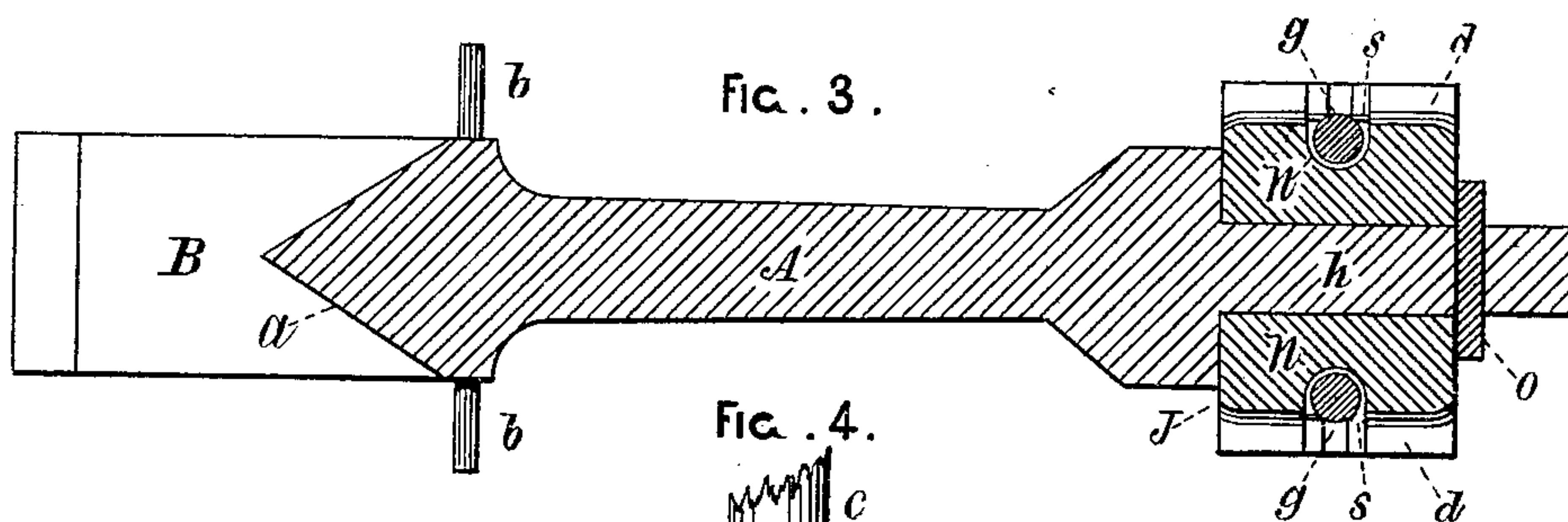
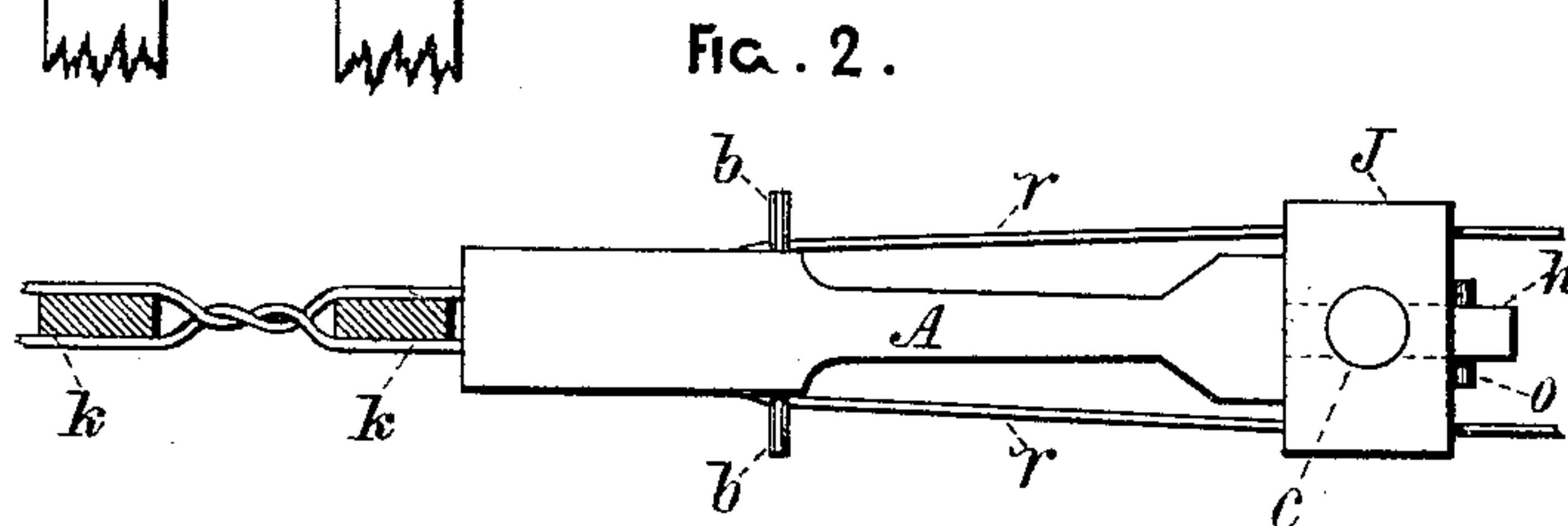
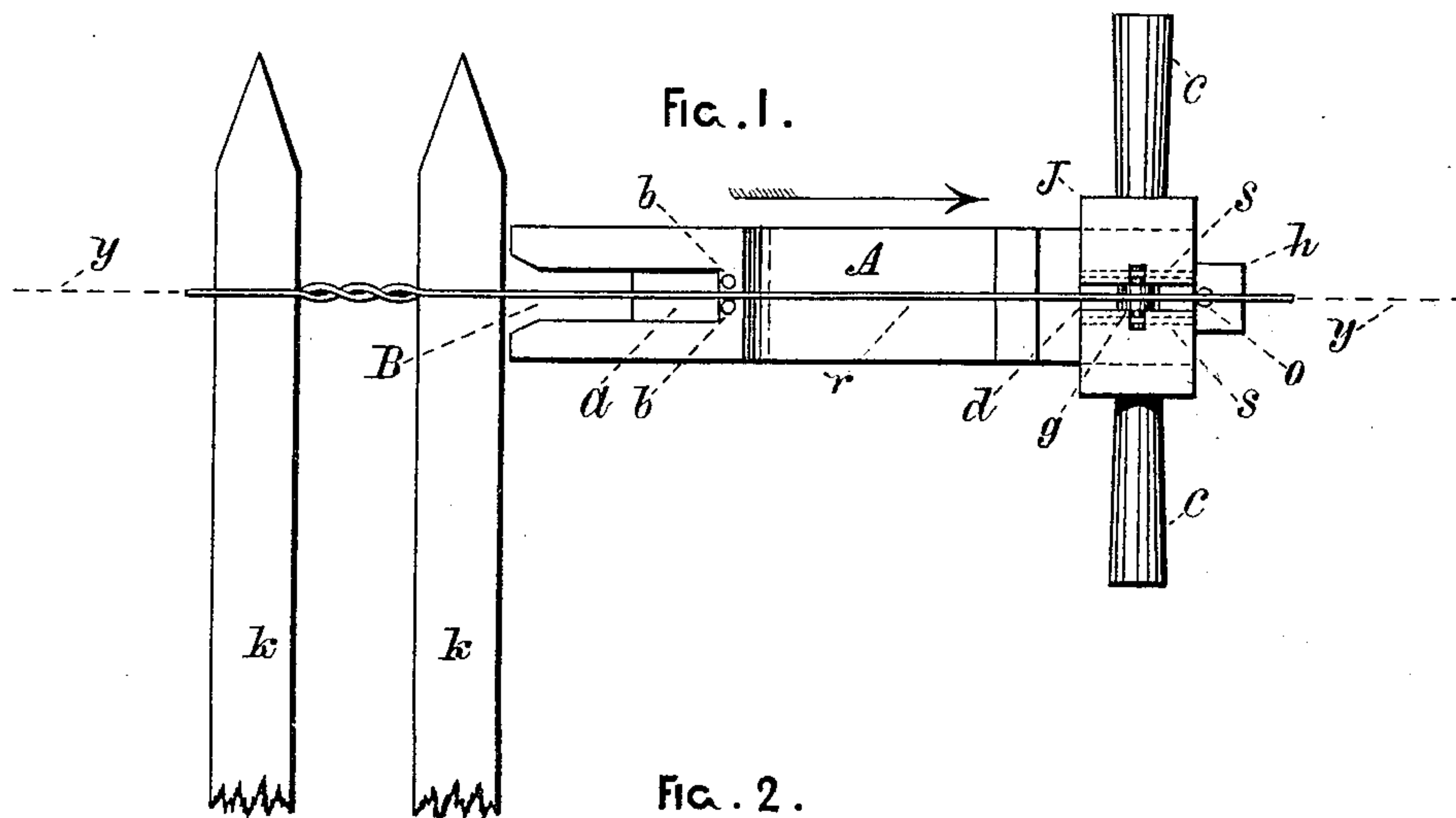
(No Model.)

J. M. BORER.

TWISTER FOR FENCE WIRES.

No. 388,175.

Patented Aug. 21, 1888.



Witnesses,

A. D. Stelle.
L. H. Leutner, Jr.

Inventor,

John M. Borer.

By his Attorney *F. S. Davenport.*

UNITED STATES PATENT OFFICE.

JOHN M. BORER, OF JERSEYVILLE, ILLINOIS.

TWISTER FOR FENCE-WIRES.

SPECIFICATION forming part of Letters Patent No. 388,175, dated August 21, 1888.

Application filed December 19, 1887. Serial No. 258,253. (No model.)

To all whom it may concern:

Be it known that I, JOHN M. BORER, of Jerseyville, in the county of Jersey and State of Illinois, have invented a new and Improved

5 Twister for Fence-Wires; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

10 My invention relates to a device for twisting the wires of fences, consisting of wooden pickets held vertically between horizontally-stretched strands of wire twisted around each other between the pickets.

15 My object is to provide a twister that can be actuated by hand, of more simple construction, and consequently less expensive than those heretofore in use for the same purpose.

20 With this end in view my invention consists in certain details of construction and combinations of parts, fully explained in the following specification, and illustrated in the accompanying drawings, in which—

25 Figure 1 is a side elevation of the twister shown in connection with a portion of the fence; and Fig. 2 is a plan or top view of the same, showing the pickets in transverse section. Fig. 3 is a plan view of the twister upon a larger scale, taken in the line Y Y,

30 Fig. 1; and Fig. 4 is an enlarged end elevation of the twister, taken from the right in Fig. 1, showing a part of the handles broken away.

In the drawings, A represents a bar, preferably of wood, provided at one end with a bifurcation, B, and at or near the other with handles *c c*, secured in a removable collar, J, the latter having in each side located, as shown in Fig. 1, a longitudinal groove, *d*. This

40 collar is secured upon the bar A by a tenon, *h*, and a pin, *o*. (See Fig. 3.) In the bifurcation B is a crotch, *a*, of triangular form, as shown in section in Fig. 3, having near its base, inserted in each side thereof so as to project laterally, two pins, *b b*, which serve as guides for the wires, as shown in Figs. 1 and

45 2, the space between said pins being coincident in alignment with the grooves *d*, which serve as channels or guides for the wires *r*.

50 To operate the twister, it is placed between the two wires of each course, so that a strand

will lie on each side thereof between the studs or pins *b*, and in each of the channels or grooves *d*. A picket is then inserted between the two wires. This is followed by the twister, 55 which is brought close up to the picket, as shown in Fig. 1, and by means of the handles *c* it is turned round about its longitudinal axis. The latter operation turns one wire round the other. The twister is then with- 60 drawn in the direction indicated by the arrow in Fig. 1. After inserting the next picket the twister is turned in the opposite direction. By thus turning the twister alternately to the right and the left as the pickets are suc- 65 cessively inserted the wires are kept free from entanglement at the rear of the twister.

The operation of sliding the twister endwise between the two wires is facilitated by the anti-friction rollers *g*, upon which the wires 70 impinge laterally, said rollers being journaled in cavities *n*, (see Fig. 3,) in the collar J, and retained in position by pins *s s* inserted in the collar so as to lie across the journals of the rollers, as shown partly in dotted lines in Figs. 75 1 and 3. These pins are not, however, necessary to the operation of the twister, as the inward pressure of the wires keeps the rollers in place when the twister is in use, their only functions being to keep the rollers from fall- 80 ing out of the cavities *n* when the twister is not in use; and, further, the collar J may, if so preferred, be made integral with the bar A.

It will be observed that the use of the bifurcation B, which is purposely but little 85 wider than the thickness of the pickets with a wire on each side them, is to keep the central part of the front edge of the crotch *a* between the wires, and thus secure a concentric twist. The bifurcation further serves for gaging the 90 length of the twist, or its termination rearward. When the twister is brought up to the picket as close as it can be revolved, as shown in Fig. 1, the forward edge of the crotch *a* is at the point beyond which the twist must not 95 extend, thus making all the twists of the same length, and consequently securing all the pickets at equal distances apart.

If so preferred, two or more twisters may be employed and operated simultaneously, one 100 upon each course of wires, thus obviating the removal from one course to the other.

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

5 In a twister for fence-wires, the combination of a bar, A, having a bifurcation, B, crotch *a*, pins or guides *b b*, channels *d*, anti-friction rollers *g*, and handles *c*, all constructed and adapted to operate substantially as and for the purpose set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 7th day of October, 1887.

JOHN M. BORER.

Witnesses:

A. W. NEWTON,
R. L. VANDENBURG.