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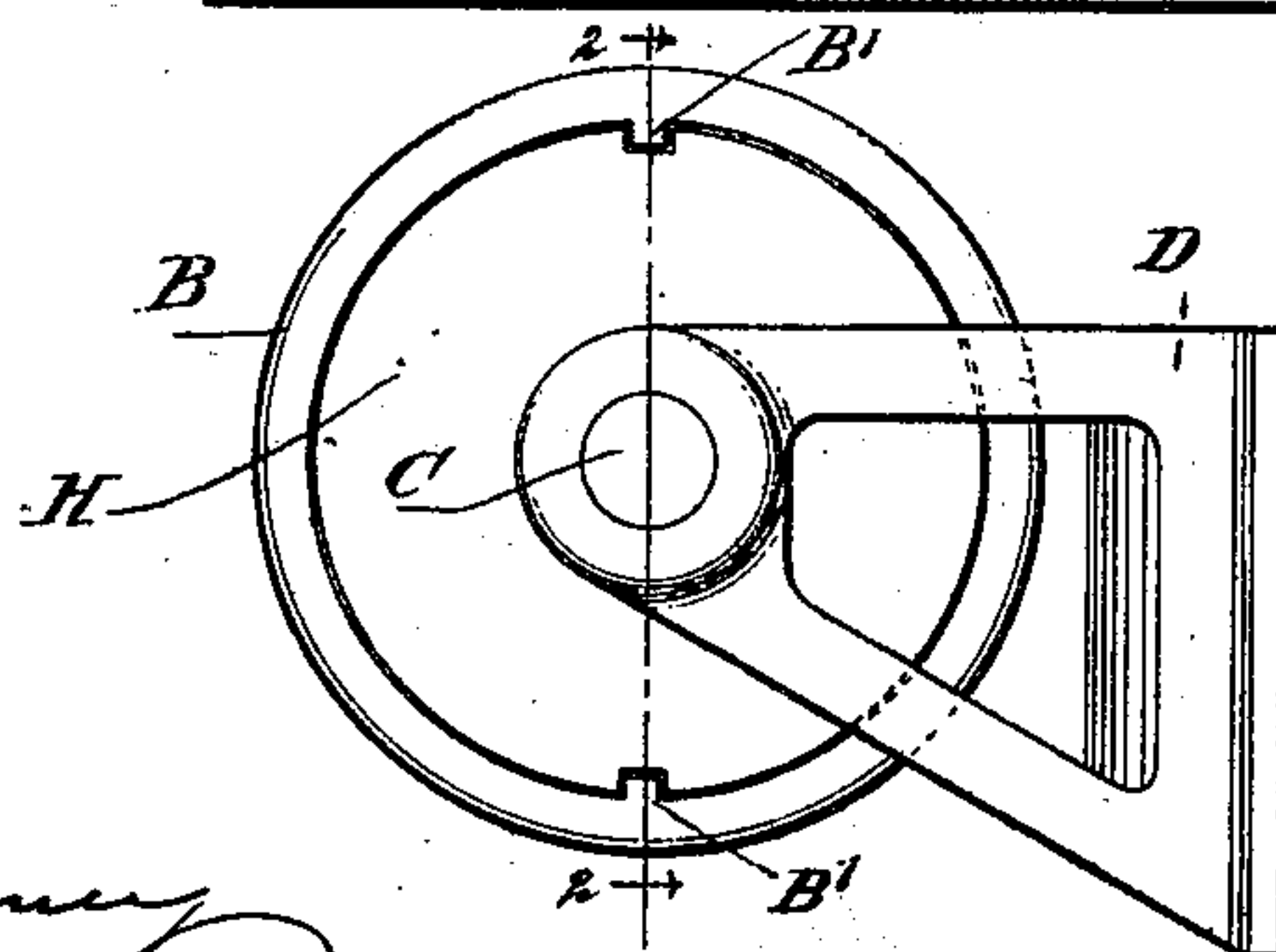
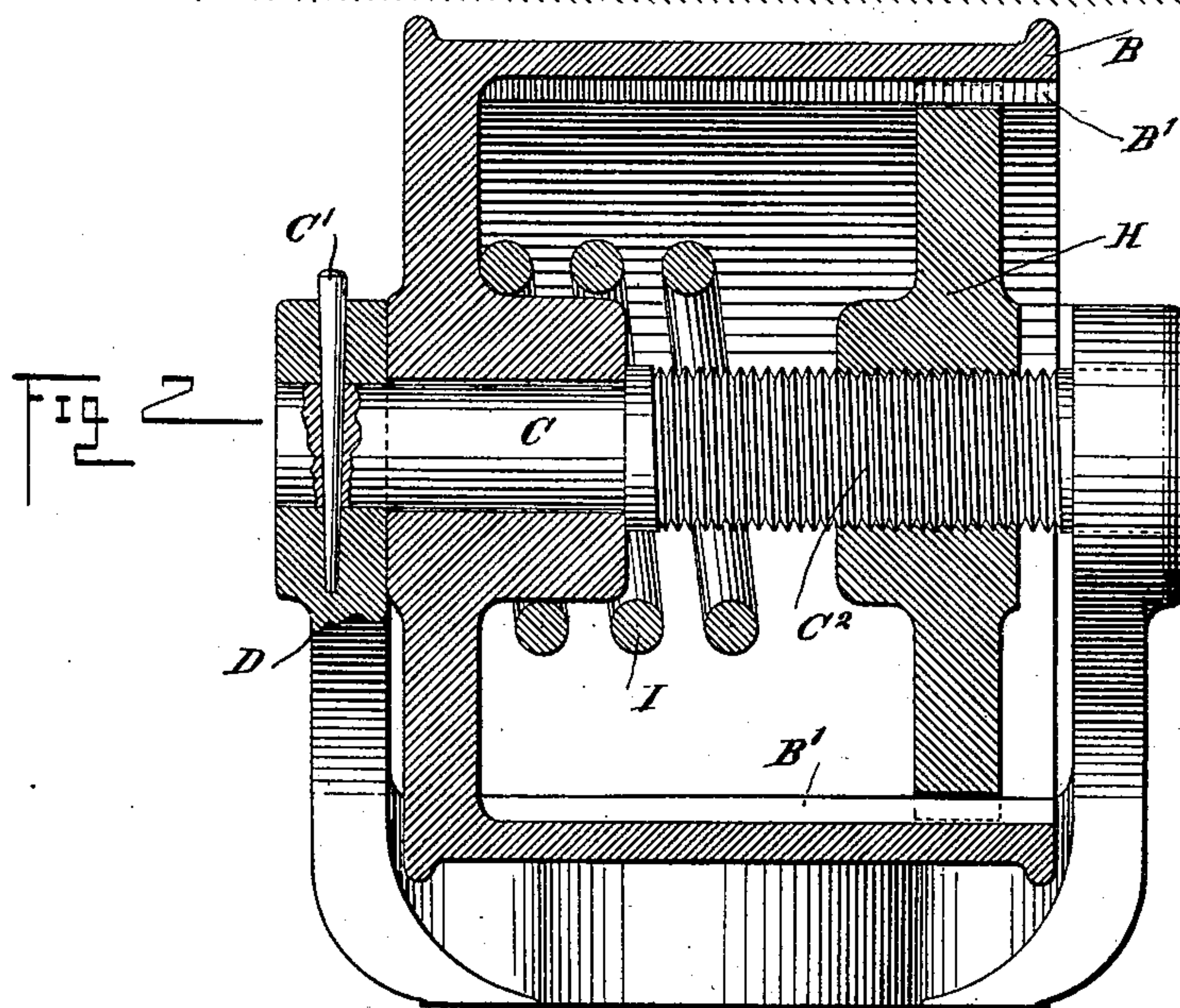
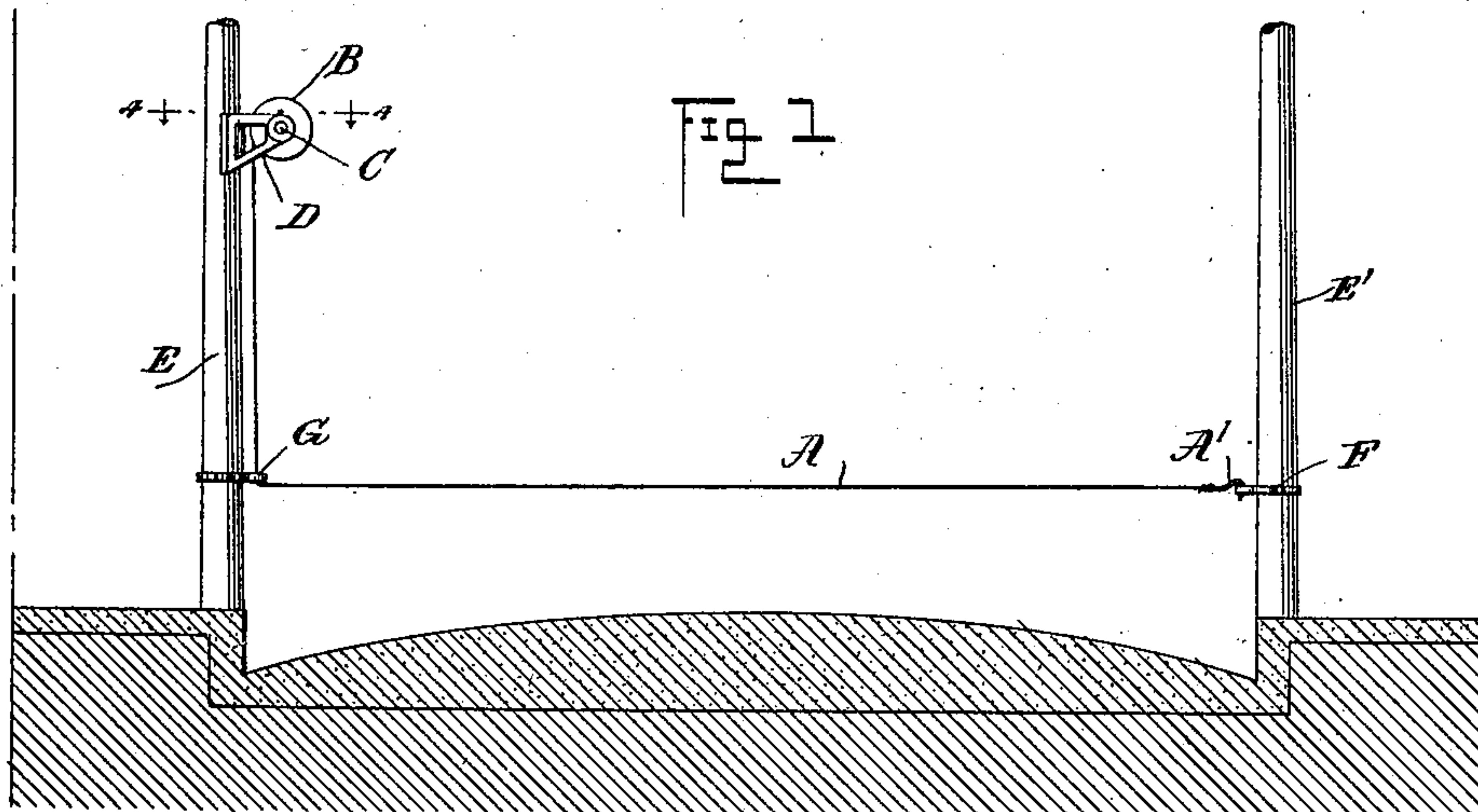
Patented June 10, 1902.

F. E. ARNOLD.
DEVICE FOR ARRESTING RUNAWAYS.

(Application filed Sept. 20, 1901.)

(No Model.)

2 Sheets—Sheet 1.



WITNESSES:
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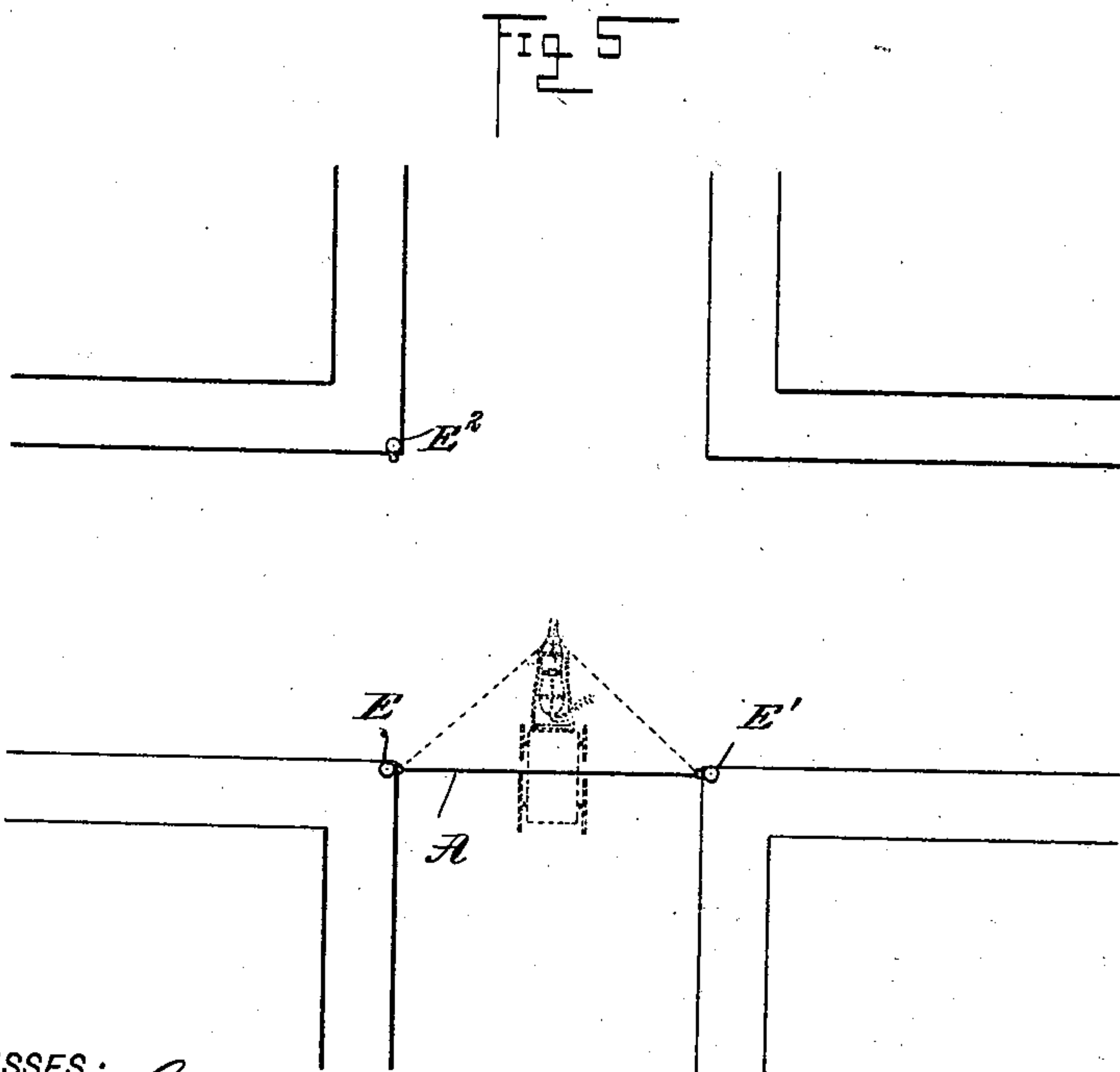
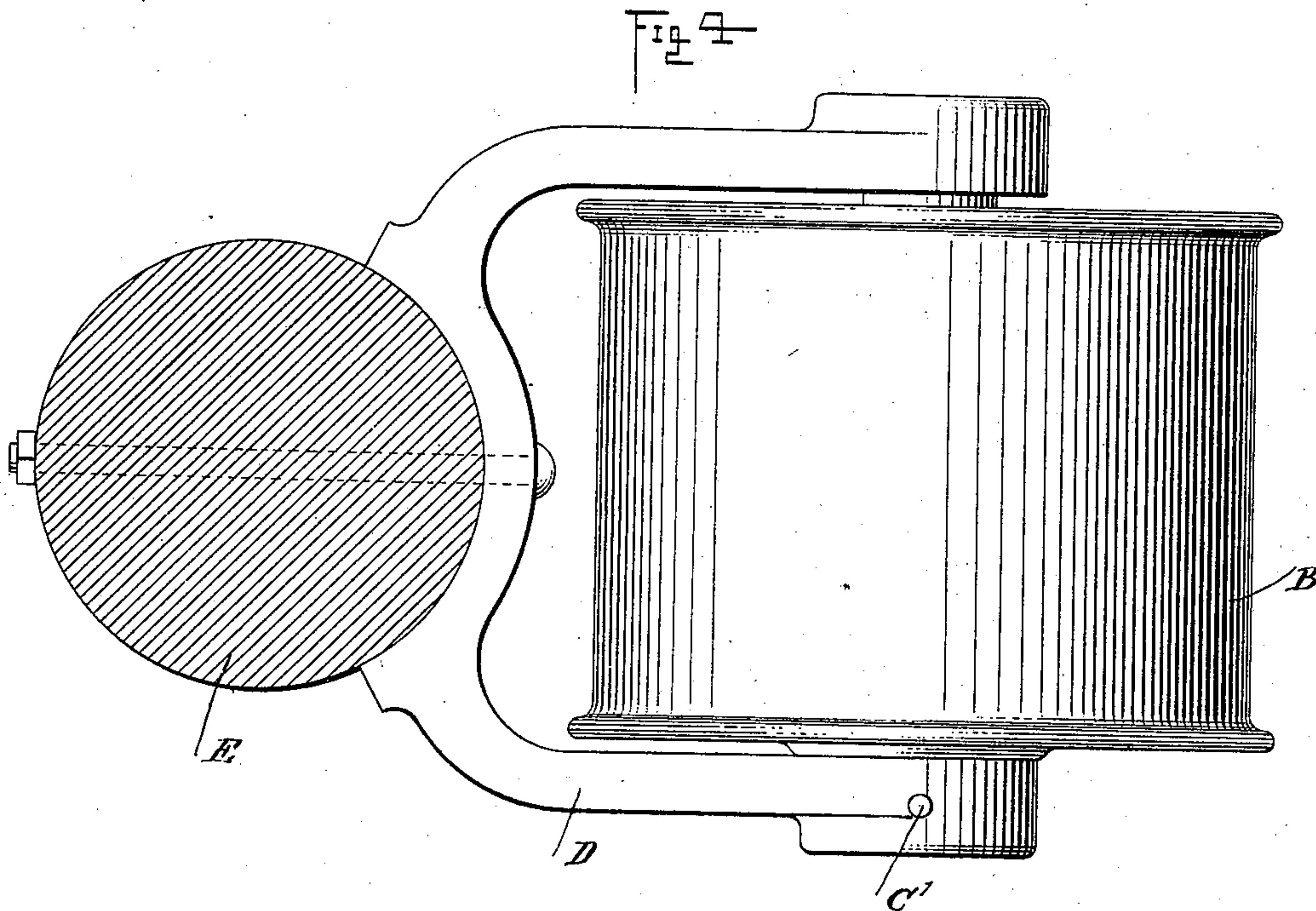
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2 Sheets—Sheet 2.



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UNITED STATES PATENT OFFICE.

FREDERIC E. ARNOLD, OF SALT LAKE CITY, UTAH.

DEVICE FOR ARRESTING RUNAWAYS.

SPECIFICATION forming part of Letters Patent No. 702,275, dated June 10, 1902.

Application filed September 20, 1901. Serial No. 75,723. (No model.)

To all whom it may concern:

Be it known that I, FREDERIC E. ARNOLD, a citizen of the United States, and a resident of Salt Lake City, in the county of Salt Lake and State of Utah, have invented a new and Improved Device for Arresting Runaways, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved device for arresting runaways, more especially and more particularly adapted for use in crowded thoroughfares of cities, the device being very simple and durable in construction, easily placed in an active position, and at all times in position for immediate use.

The invention consists of novel features and parts and combinations of the same, as will be fully described hereinafter and then pointed out in the claims.

A practical embodiment of the invention is represented in the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a cross-section of a street with the device in active position. Fig. 2 is an enlarged cross-section of the reel, the section being on the line 2 2 of Fig. 3. Fig. 3 is a reduced side elevation of the same. Fig. 4 is an enlarged plan view of the reel and its supporting-post, the latter being shown in section on the line 4 4 of Fig. 1; and Fig. 5 is a reduced plan view of the improvement as arranged at intersecting streets.

The improved device for arresting runaways consists, essentially, of a wire cable, rope, or like flexible member A, stretched across the street at a suitable height, so that the runaway animal runs against the member A at about breast high to interrupt the further forward movement of the animal, as hereinafter more fully explained. The flexible member A winds on a reel B, mounted to rotate loosely on a shaft C, secured by a pin C' to a bracket D, fastened on a post E, preferably set at one of the corners of intersecting streets, as plainly shown in Fig. 5, similar posts E' and E² being set opposite the post E at the adjacent corners, as indicated in the

said Fig. 5. Each of the posts E' and E² is provided with an eye F, adapted to be engaged by a hook A', held on the free end of the flexible member A, the latter after leaving the reel B passing through a guide-pulley G, carried by the post E at about the same height as the eye F is from the pavement. (See Fig. 1.) The flexible member A is free to unwind from the reel B to allow a bystander to take hold of the hook A', normally carried at the guide-pulley G, and run across the street and fasten the hook A' to the eye F, so as to extend the member A across the street in which the animal is running.

In order to allow the flexible member A to lengthen out after being struck by the runaway animal and to give an increasing resistance to the lengthening out of the said member A to bring the animal finally to a stop, the following device is provided: On the inside of the reel B are formed transverse guide-ways B', in which is mounted to slide a plate or disk H, having its central threaded aperture screwing on a screw-rod C², forming part of the shaft C previously mentioned. (See Fig. 2.) The inner end of the plate H is normally a distance away from the free end of the coil-spring I, arranged within the reel B, so that when the flexible member A is stretched across the street, as previously described, the reel B is turned such distance that the plate H is moved inward to engage the free end of the spring I. Now a further unwinding of the flexible member A from the reel B on the further forward movement of the animal carrying the flexible member A along causes rotation of the reel B, and consequently further movement of the plate H, to compress the spring I, thereby giving a resistance to the reel B and the flexible member A to finally bring the runaway to a stop. It is understood that by this arrangement the flexible member A is not liable to be broken by the impact of the animal, and at the same time the flexible member is capable of lengthening out with an increasing resistance to gradually and forcibly bring the animal to a dead stop. The frame for carrying the guide-roller G has a limited turning movement on the post E to bring the guide-roller G in proper position

for stretching the member A from the post E to either of the posts E' or E².

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

1. A runaway-arrester comprising a reel, a flexible member, a reel resistance device having normally separated members, and means actuated by said reel to bring said resistance
10 members in operative engagement with the reel and to oppose the continued rotation of the latter with increasing force.

2. In a runaway-arrester, the combination with a reel, and a flexible member, of a reel
15 resistance device having normally separated members, one of which is revoluble with the reel and the other member is arranged to oppose the rotation thereof, and means for bringing said members into coöperative rela-
20 tion on the withdrawal of a certain length of the flexible member.

3. In a runaway-arrester, the combination with a reel, and a flexible member, of a resistance member revoluble with said reel and
25 slidable therein, another resistance member adapted to be engaged by the slidable and revoluble member, and means for bringing said resistance members into coöperative relation on the continued withdrawal of said
30 flexible member.

4. In a runaway-arrester, the combination with a reel, and a flexible member, of a compressible resistance member, a slidable resistance member normally separated from
35 said first-named resistance member, and means for bringing said slidable member into

active engagement with said compressible member on the rotation of said reel.

5. In a runaway-arrester, the combination of a shaft having a threaded portion, a reel, 40 a compressible resistance member within the reel, and a resistance-disk having threaded engagement with said shaft and slidable connection with the reel.

6. A runaway-arrester, comprising opposite 45 posts at the sides of a street, a reel carried by one of the posts, a cable winding on the said reel and having fastening means at its free end to secure it to the other post, and a resistance in the reel and controlled by the 50 rotation of the reel, to resist the unwinding of the cable after the same is stretched across the street from one post to another, the said resistance comprising a spring, a plate turned by and sliding in the reel and adapted to en- 55 gage and compress the said spring, and a screw-rod on which the plate screws, as set forth.

7. A runaway-arrester, comprising a plurality of posts at the corners of intersecting 60 streets, a reel on one of the posts, a cable winding on the reel and adapted to be fastened to either of the other posts, and a guide-roller on one of the posts and having its frame 65 mounted to turn on the post, as set forth.

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

FREDERIC E. ARNOLD.

Witnesses:

FRANK TROTT,
WM. H. CHILD.