

(No Model.)

F. BRACKEN.
METAL COILING APPARATUS.

No. 407,277.

Patented July 16, 1889.

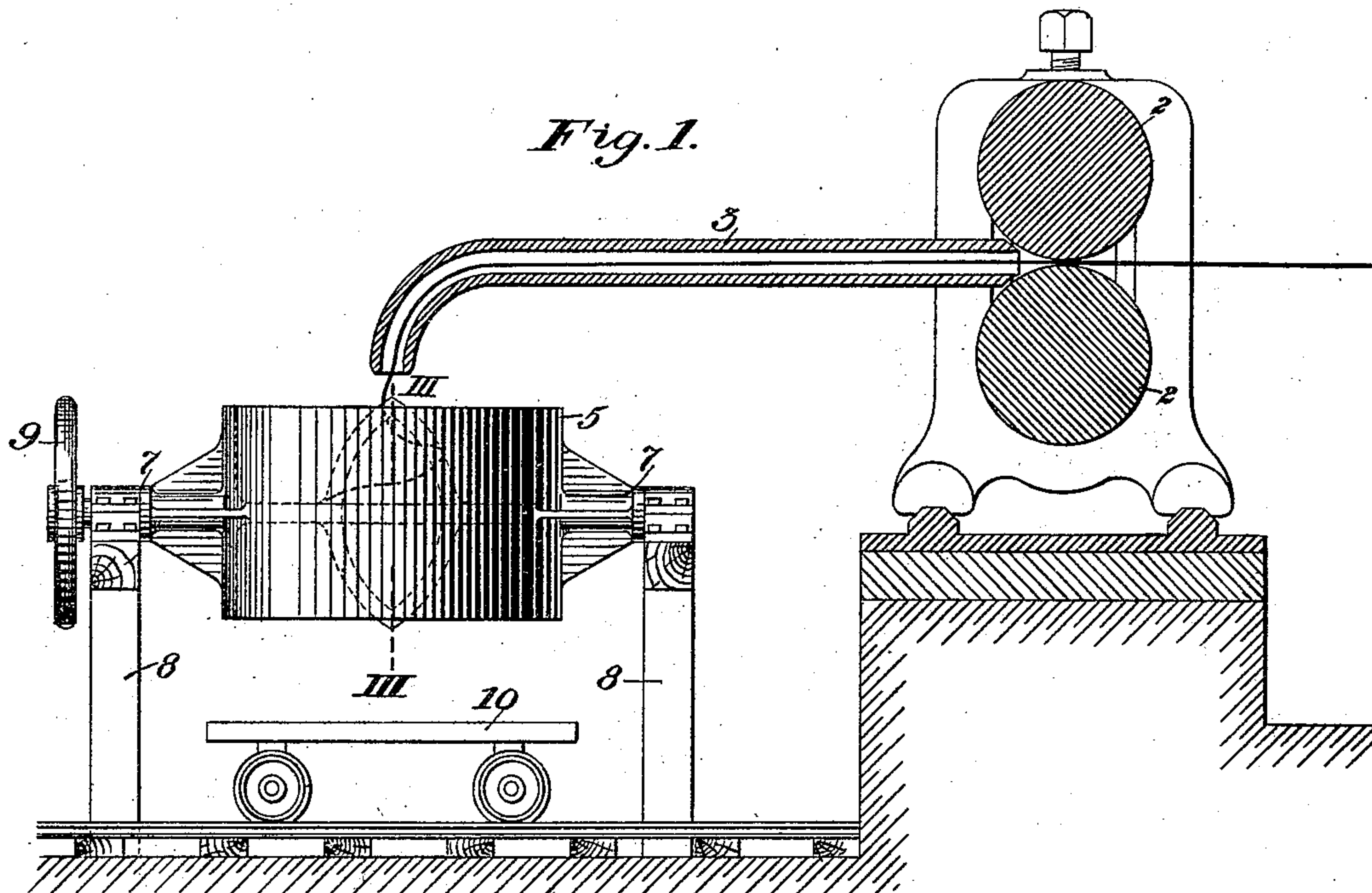


Fig. 2.

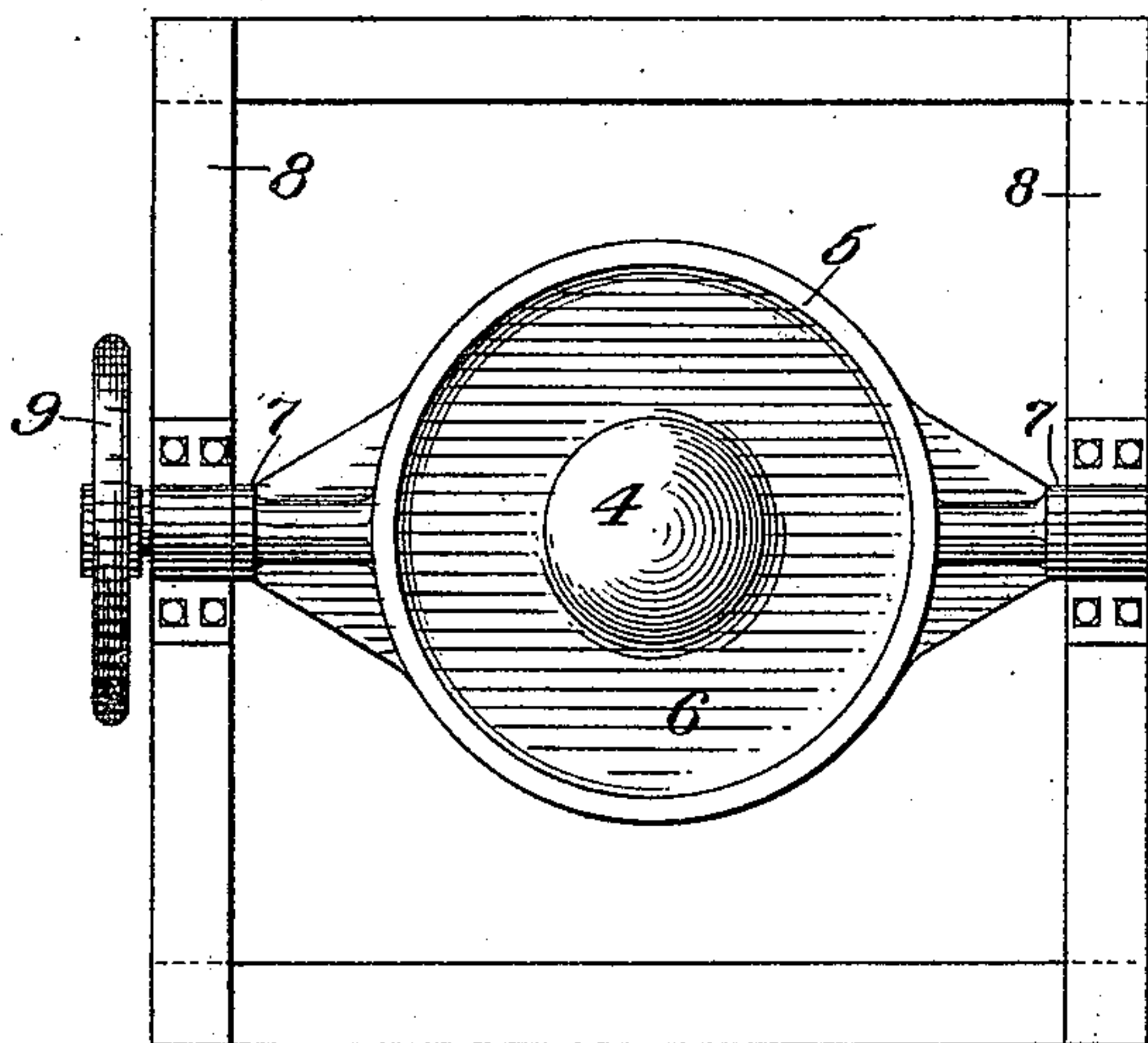
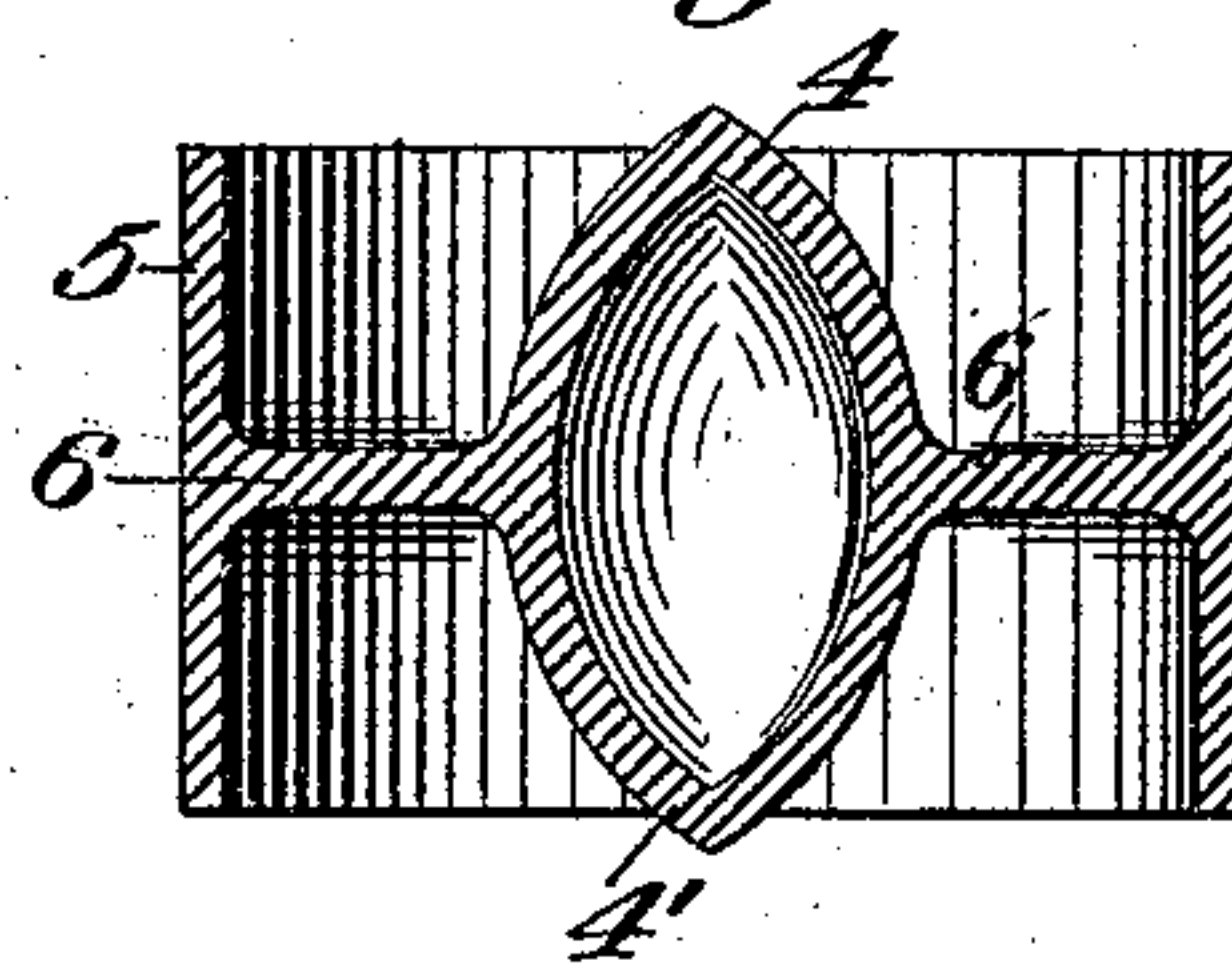


Fig. 3.



WITNESSES.

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UNITED STATES PATENT OFFICE.

FRANK. BRACKEN, OF PITTSBURG, PENNSYLVANIA, ASSIGNOR TO HENRY ROBERTS, OF SAME PLACE.

METAL-COILING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 407,277, dated July 16, 1889.

Application filed April 11, 1889. Serial No. 306,873. (No model.)

To all whom it may concern:

Be it known that I, FRANK. BRACKEN, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Apparatus for Coiling Metal, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation, partly in section, of my improved apparatus. Fig. 2 is a plan view of the coiling apparatus. Fig. 3 is a vertical cross-section on the line III III of Fig. 1.

Like symbols of reference indicate like parts in each.

The object of my invention is to provide means for automatically coiling the product of a wire-rod mill as it is delivered from the final set of rolls; and it consists in the novel construction and arrangement of parts, hereinafter described, and concisely indicated in the following claims.

Referring to the drawings, 2 2 represent the finishing-rolls of a wire-rod mill, which may be of any suitable construction, and 3 is a guide-tube leading therefrom to the coiling apparatus. This apparatus consists of a turret or post 4, tapering or conical in form, and having its apex opposite the delivery end of the guide-tube, which is curved or otherwise shaped so that its end shall be properly directed. In the use of the apparatus the wire rod is delivered by the rolls into the guide-tube, and on emerging therefrom engages the upper portion of the turret. The impetus of the rod, the action of gravitation, and the tapering form of the turret combined, will cause the rod automatically and regularly to coil itself around the turret. When the entire rod has been thus coiled, it may be removed from the turret by any suitable means.

I prefer, for convenience in operation, to construct the apparatus as follows, and desire to claim such construction specifically, though my invention, broadly considered, is not limited thereto: 5 is a box or case, made, preferably, of cylindrical form and having at its middle a transverse partition 6, thus constituting two coiling or receiving compartments, in each

of which is secured a turret 4 or 4'. The two turrets and the partition 6 may conveniently be cast of a single piece of metal. The box 5 is journaled at its middle portion on horizontal pivots 7 in an upright housing or frame 8. When one of the compartments of the box, situate as shown in the drawings, has received a complete coil, the box may be turned on its pivots 7 by means of the hand-wheel 9, so as to transpose the position of the compartments and of the turrets 4 and 4', thus causing the coil to drop upon a car or other receiving-surface 10, and to bring the empty compartment into proper position to receive a fresh coil.

Many modifications in form and details of construction of the apparatus may be made by those skilled in the art without involving a departure from the principles of my invention.

The advantages of my invention will be appreciated by those skilled in the art.

The apparatus is simple in its construction and enables the rod to be coiled automatically without need of driving or rotating any of the parts.

I claim—

1. In apparatus for coiling metal rods, the combination, with the roll, of a tapering or conical turret, and a guide leading from the rolls and having a stationary delivery end at the end of the turret, substantially as and for the purposes described.

2. The combination of the rolls 2, the conical turret 4, and a guide 3, leading from the rolls and having its delivery end flared and directed to the apex of the turret, substantially as and for the purposes described.

3. The double coiling-box provided with opposite compartments having turrets, said box being mounted on pivots so as to be capable of being overturned, substantially as and for the purposes described.

In testimony whereof I have hereunto set my hand this 30th day of March, A. D. 1889.

FRANK. BRACKEN.

Witnesses:

THOMAS W. BAKEWELL,
W. B. CORWIN.