

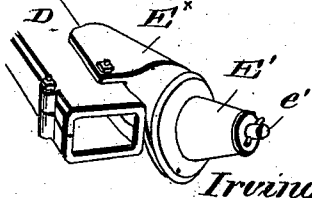
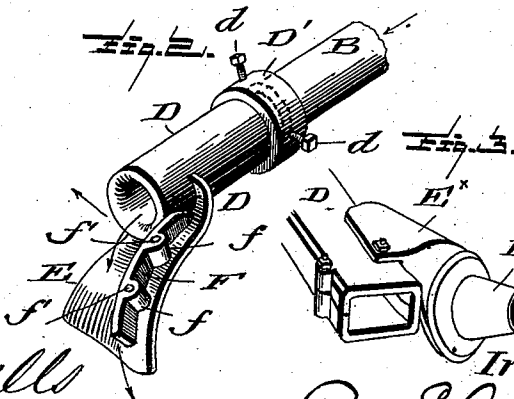
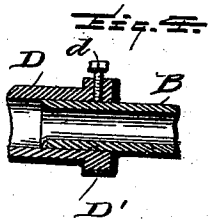
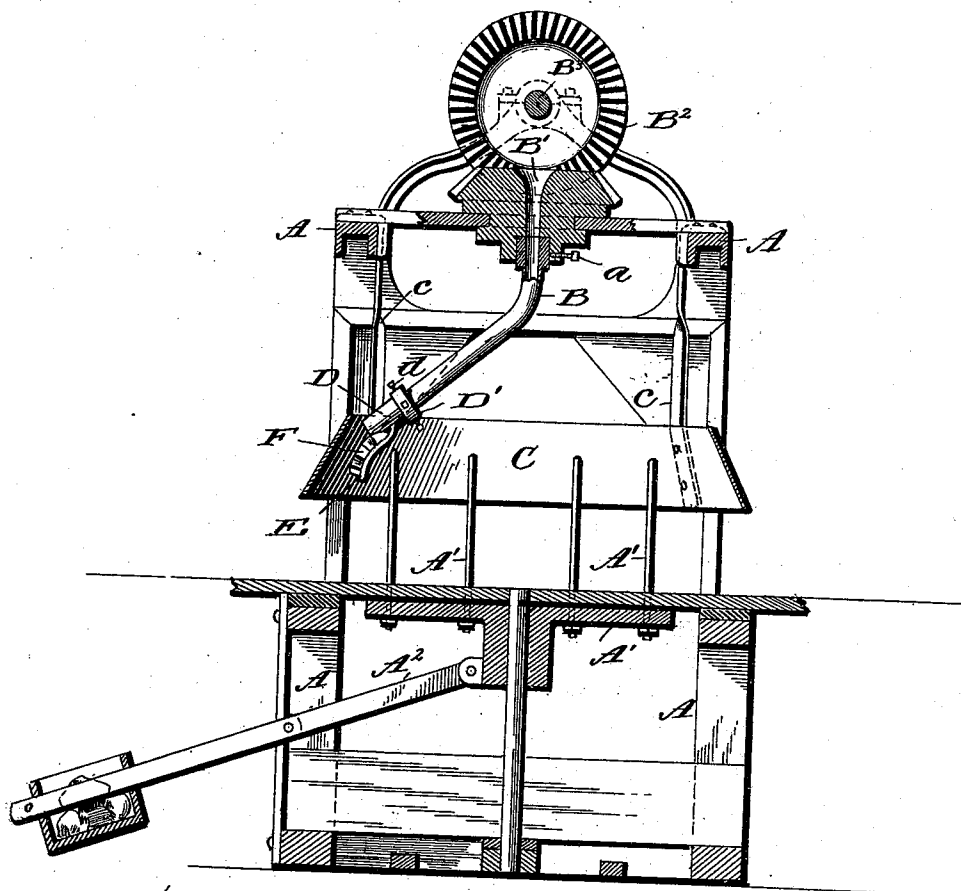
(No Model.)

I. A. KILMER.
ROD REEL.

No. 501,251.

Patented July 11, 1893.

Fig. 1.



Witnesses
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UNITED STATES PATENT OFFICE.

IRVING A. KILMER, OF NEWBURG, NEW YORK.

ROD-REEL.

SPECIFICATION forming part of Letters Patent No. 501,251, dated July 11, 1893.

Application filed December 13, 1892. Serial No. 455,067. (No model.)

To all whom it may concern:

Be it known that I, IRVING A. KILMER, a citizen of the United States, residing at Newburg, in the county of Orange, State of New York, have invented certain new and useful Improvements in Rod-Reels, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and useful improvements in rod-reels and it has for its object among others to provide a simple and yet efficient attachment to the delivery tube whereby I am enabled to use a straight delivery tube, the attachment serving to deflect the wire and cause it to properly coil itself around the drum or reel. The attachment consists essentially of an extension of the delivery tube longitudinally and axially adjustable thereon, the said extension carrying a plate of peculiar shape and provided with a removable guide for the wire. The delivery end of the tube is arranged to be revolved within a hood which serves to deflect the wire against the said plate and guide.

Other objects and advantages of the invention will hereinafter appear and the novel features thereof will be specifically defined by the appended claims.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a central vertical section through my improvements. Fig. 2 is an enlarged perspective view of the attachment on the discharge end of the delivery tube. Fig. 3 is a perspective detail of a modified form of attachment. Fig. 4 is a sectional detail.

Like letters of reference indicate like parts in all of the views.

Referring now to the details of the drawings by letter, A designates a suitable framework for supporting the operating parts, and A' the reel or drum around which the wire is to be coiled; this reel or drum is designed to be moved vertically to disengage it from the coil and this may be accomplished in any suitable manner, as for instance by the weighted lever A², as shown, or in any other well-known way. This, however, as well as the mechanism for giving motion to the delivery tube may be of any preferred form of con-

struction. I have shown the delivery tube B as held in a socket in the lower portion of the bevel gear B' as seen in Fig. 1, it being preferably detachably held therein as by set screw *a*, and this gear is adapted to be revolved by the intermeshing bevel gear B² carried by the shaft B³ which is suitably mounted and adapted to receive its motion from any suitable source of power. These are matters however which do not pertain to the present invention and may be varied as may be desired.

C is a hood suspended from the frame-work in any suitable manner, as by the hangers *c* and this hood is so arranged relatively to the attachment on the end of the delivery tube whereby the wire as it is delivered from said tube will contact with the inner wall of the hood and thence be thrown against the guide on the plate which is supported on the end of the said tube. The delivery tube is practically a straight tube, being bent slightly near its junction or connection with the bevel gear which carries it, in order to throw its lower end outward as seen in Fig. 1.

Upon the lower end of the tube is placed my improved attachment which is shown enlarged in Fig. 2 and which consists essentially of a tubular portion D which is supported by the collar D' which is adapted to receive the lower end of the delivery tube and is provided with a set screw or set screws *d* as shown whereby the collar can be adjusted both longitudinally on and axially about the lower end of the tube and held in any desired adjusted position by means of the said set screws. This tubular portion carries a plate E which is broadened near its free end and which is also curved downward and outward away from the bore of the tubular portion as seen in Fig. 2, and upon this plate to the side of the bore opposite the direction of movement of the tube is detachably affixed a curved vertical guide F, which may be detachably held in place in any suitable manner, as by being provided with lugs *f* adapted to engage over pins *f'* on the plate as seen in Fig. 2, so that the said guide may be easily removed when it becomes worn.

The operation will be readily understood.

The arrows in Fig. 2 indicate the direction of movement of the delivery tube and also of the wire as it emerges therefrom.

The attachment can be easily adjusted to vary the course of the wire or to compensate for wear of the parts.

The hood may be omitted if desired.

- 5 Modifications in detail may be resorted to without departing from the spirit of the invention or sacrificing any of its advantages; for instance, the extension D may be rectangular as shown in Fig. 3, or the plate E^x may be detachable from the extension as also
10 seen in Fig. 3.

Instead of the guide plate F being in the form shown in Fig. 1 and above described it may be in the form of a wheel E' and detachably mounted on a stud e' supported in the
15 plate E^x as seen at the right of Fig. 2; as the last end of the rod is drawn from the tube the rod is thrown under the wheel by centrifugal force and the wheel rotates, thus reducing the friction.
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What is claimed as new is—

1. An attachment for the delivery tube of a rod reel, the same comprising an essentially tubular portion with a wire guiding plate
25 mounted on and extended beyond the end thereof, as set forth.

2. An attachment for the end of a delivery tube of a rod reel consisting essentially of a tubular portion with a guiding plate mounted
30 on and extended beyond its end and a vertical guide mounted on said plate and also extended beyond the end of the tubular portion, as set forth.

3. An attachment for the delivery tube of a rod reel, consisting of a tubular portion, a collar for supporting the same, and a curved plate carried by the tubular portion and provided with a vertical guide, as set forth. 35

4. The combination with a delivery tube, of a collar adjustable thereon, a tubular portion supported by the collar, and a plate on the tubular portion provided with a vertical guide, as set forth. 40

5. The combination with the delivery tube, of a collar adjustable thereon, a tubular portion carried by the collar, a curved plate on the tubular portion and a removable vertical guide on the plate, as set forth. 45

6. An attachment for the delivery tube of a rod reel, consisting of a collar, a tubular portion carried thereby, a curved plate on the tubular portion and extended beyond the end thereof, and a vertical guide on said plate, substantially as and for the purpose specified. 50

7. An attachment for the delivery tube of a rod reel, consisting essentially of a tubular extension of said tube, a wire-guide curved at its outer end and extended beyond the end of said extension, and a vertical guide carried by said guide, substantially as specified. 55

In testimony whereof I affix my signature in presence of two witnesses. 60

IRVING A. KILMER.

Witnesses:

W. J. MCKAY,
M. O. KILMER.