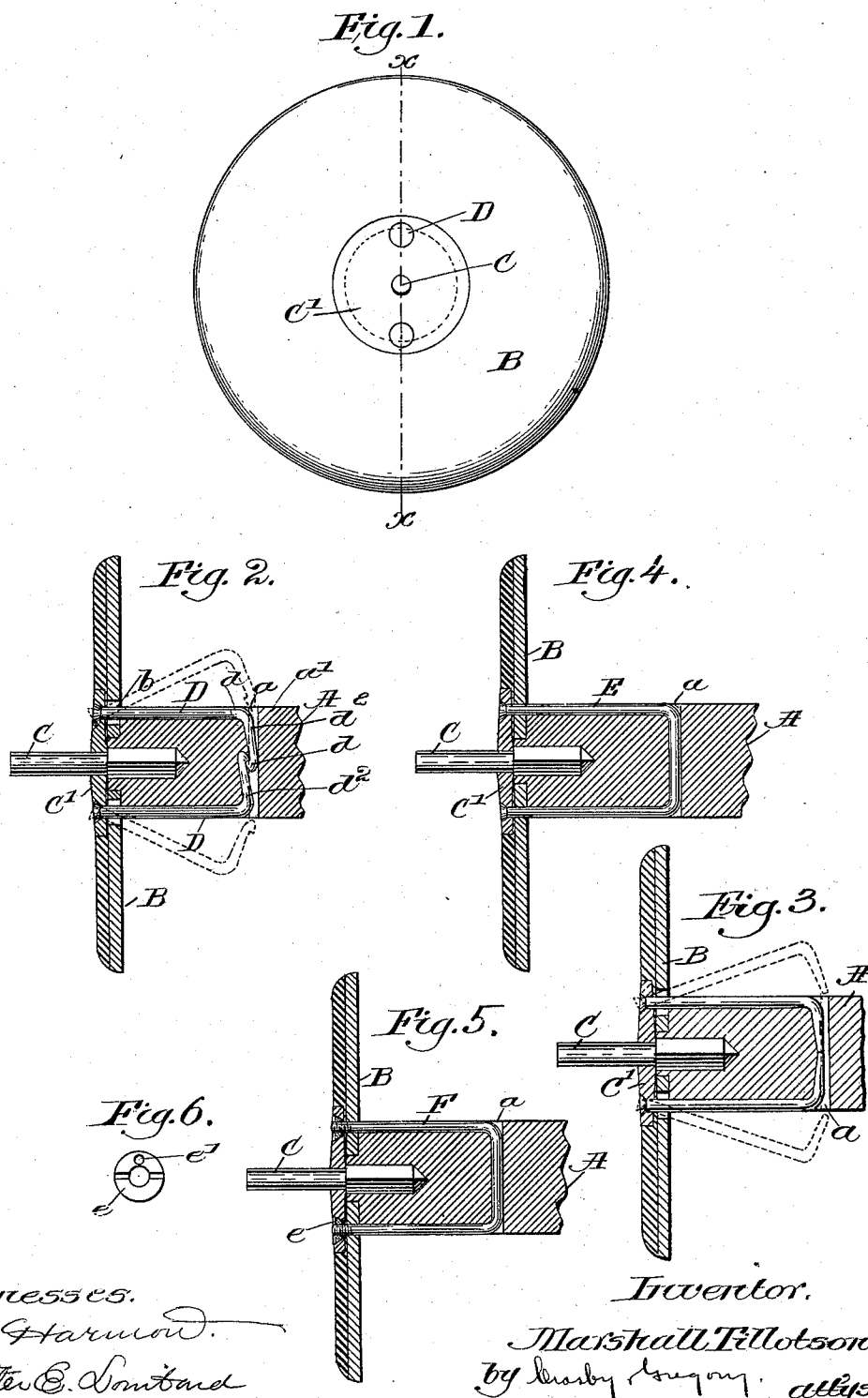


(No Model.)

M. TILLOTSON.
SPOOL HEAD FASTENING.

No. 580,297.

Patented Apr. 6, 1897.



Witnesses.
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UNITED STATES PATENT OFFICE.

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SPOOL-HEAD FASTENING.

SPECIFICATION forming part of Letters Patent No. 580,297, dated April 6, 1897.

Application filed January 20, 1897. Serial No. 619,894. (No model.)

To all whom it may concern:

Be it known that I, MARSHALL TILLOTSON, of Vassalborough, in the county of Kennebec and State of Maine, have invented an Improvement in Spool-Head Fastenings, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

This invention has for its object to provide a spool with a novel fastening device by which to attach its head to its body very securely, so that there will be no liability of the head becoming loose on the body or the journals outside the head becoming loose.

In accordance with my invention I attach the heads to the body by means of locking-dogs, which, when in place, constitute a U shaped loop, which may be in two pieces or one piece, it presenting a portion which is extended diametrically across the axis of the body of the beam, leaving two substantially-parallel arms which extend toward the end of the beam, said ends passing through the head and through the usual metal plate lying outside the beam-head and beyond which the usual journal of the beam extends, said arms being securely fastened in or to said plate.

Figure 1 shows a face or end view of a spool having its head attached in accordance with my invention. Fig. 2 is a longitudinal section on the line *x*, Fig. 1. Figs. 3, 4, and 5 show modifications of my invention, and Fig. 6 is a detail of Fig. 5.

In accordance with my invention the body A of the spool and the head *b* are and may be all as usual. The journal C is rounded where it is exposed outside of the head, and its opposite end is forged to a square or other irregular shape in cross-section, so that when driven into a round hole made in the end of the beam the journal will be securely fixed in place beyond any possibility of its being turned. The metallic washer C', applied to the outer side of the head on the said journal, may be of usual shape.

In Figs. 1 and 2 I provide the body A, as shown, with a transverse bore or hole *a*, in which I enter a portion of the U-shaped locking-dog or loop-like fastening device D, the

dog or loop represented in said figures being shown as composed of two parts, each having a head and bent near its inner end, as at *d*², each of said ends being preferably beveled and provided with a hook or locking device *d'*.

To secure the heads on the body, Figs. 1 and 2, I first put the locking-dogs or loops through the holes in the plate C' and then through enlarged holes *b* made in the head, bringing the points of the bent arms *d*² of the dogs or loops opposite the outer ends of the bore or hole *a*, as shown by dotted lines in Fig. 2, the said hole being located at such a distance from the end of the beam that as the bent ends enter the said bore or hole, they being driven therein by blows of a hammer or other device, the said dogs or loops act to draw the head firmly upon or against the end of the body, the bore or hole being commonly called a "draw-bore."

The bent ends *d*² of the dog or loop are driven into the bore or hole until the hooked ends pass each other and lock together, and thereafter it will be practically impossible to remove the heads or for the head in any manner to become loose.

In the modification, Fig. 3, I have omitted the hooks at the ends of the bent portions *d*².

In Fig. 4 I have shown a loop (marked E) as made in one piece of wire, the wire forming the loop being first inserted through the bore or hole *a* when straight and being then bent into the U form, after which the head and the journal-plate will be applied to the ends of the two parallel arms of the loop, and the said ends will thereafter be headed or upset in said holes at the outer portion of the plate. In Fig. 5 I have shown a similar loop, which I have designated F, its ends being provided with screw-threads, upon which I have applied nuts *e*, one of the said nuts being shown detached in Fig. 6, and these nuts, when screwed down snugly in place, may be locked against accidental rotation by driving a nail through the hole *e'* in the nut, the hole entering the head *b*.

The spool herein described may be used to hold yarns for spinning telegraphic or other wire, or for any other purpose required of such spool.

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

1. A spool composed of a body having a
5 transverse bore or hole, a head and a metallic
plate applied thereto outside the head, the
said head and plate being connected to the
body by a U-shaped dog or loop having por-
tions extended transversely through the bore
10 or hole in the body, the heads on the parallel
arms of the dog or loop engaging the plate
outside the head at the end of the body, sub-
stantially as described.

2. A spool-body having a transverse bore
15 or hole, combined with a dog or loop present-
ing parallel locking-arms having bent por-
tions to enter said bore or hole, and lock and

draw the said plate and head firmly to the end
of the body, substantially as described.

3. A spool-body having a transverse bore 20
or hole, a head and journal-plate, combined
with a dog or loop presenting parallel lock-
ing-arms having bent portions to enter said
bore or hole, said bent portions being provided
with hooked ends to engage and lock together 25
when driven into said bore or hole in the body,
substantially as described.

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

MARSHALL TILLOTSON.

Witnesses:

ROBERT D. RICE,
JNO. J. GOODY.