No. 762,584. PATENTED JUNE 14, 1904.

W. G. HARTLEY.

FLEXIBLE LOOPER FOR DOUP WEAVING.

APPLICATION FILED AUG. 20, 1903.

NO MODEL.

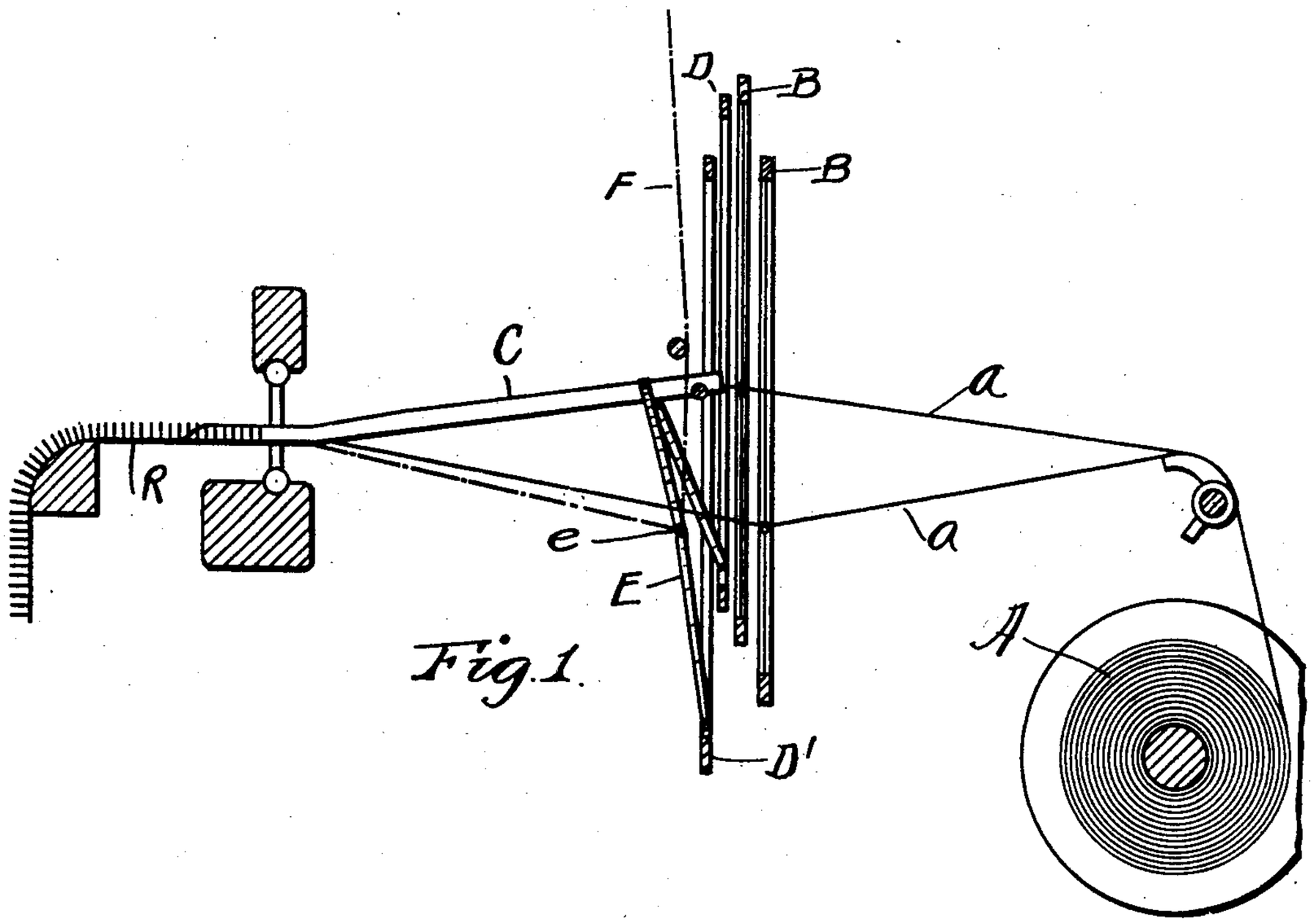

Fig. 1.

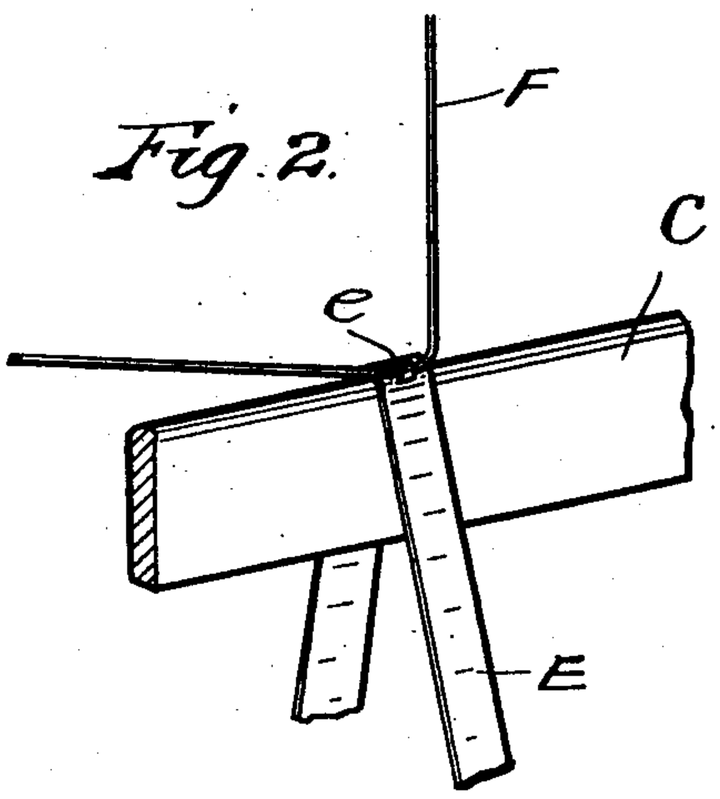

Fig. 2.

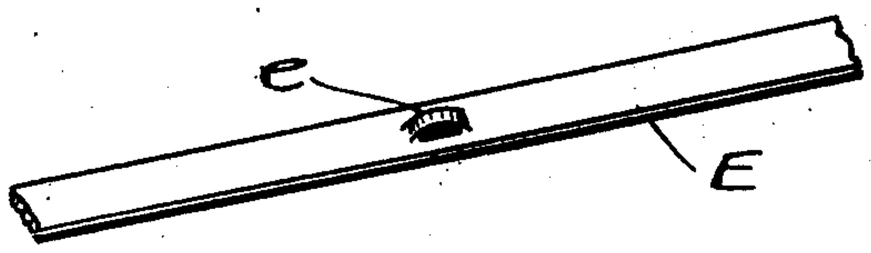

Fig. 3.

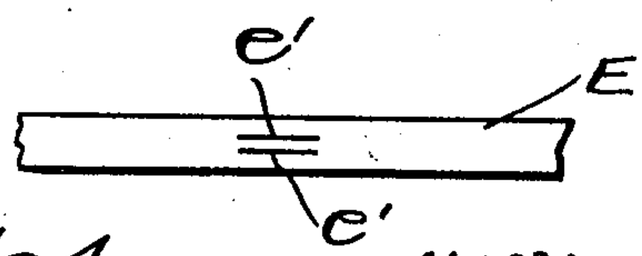

Fig. 4.

Witnesses

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No. 762,584. Patented June 14, 1904.

UNITED STATES PATENT OFFICE.

WILLIAM G. HARTLEY, OF AMESBURY, MASSACHUSETTS, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, TO HARTLEY LOOP WEAVE COMPANY, OF AMESBURY, MASSACHUSETTS.

FLEXIBLE LOOPER FOR DOUP-WEAVING.

SPECIFICATION forming part of Letters Patent No. 762,584, dated June 14, 1904.

Application filed August 20, 1903. Serial No. 170,163. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM G. HARTLEY, a resident of the town of Amesbury, in the county of Essex and State of Massachusetts, have invented certain new and useful Improvements in Flexible Loopers for Doup-Weaving; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention pertains to carriers for moving the pile-threads to form loops in doup-weaving, and has for its object the production of a carrier constructed of a thin strip or ribbon of very flexible material, said strip having an eye formed in it on its upper side, through which eye said pile-thread may be rove, allowing the carrier to always draw flat over the pile wire or former and at the same time carry the thread on top of the tape.

The invention is fully described in this specification and illustrated in the accompanying drawings, in which—

Figure 1 illustrates my device in position on the loom to be operated over the pile wire or former. Fig. 2 is an enlarged perspective view in detail illustrating my flexible carrier as drawing the thread over the pile wire or former. Fig. 3 is a perspective view illustrating my carrier as lying out flat, showing the eye raised in position to receive the thread. Fig. 4 is a plan view of the carrier, showing the two slits which are cut out to form the eye therein.

Referring to the drawings, A in Fig. 1 is the usual yarn-beam that carries the warp-threads *a a*, from which the ground fabric R is woven. On this ground fabric is formed the loops or pile by my looper E, carrying the pile-threads F over the pile wire or former C.

D D′ are the two frames illustrating one way in which my carrier may be operated, and B B are the harnesses that control the ground warp-threads. This carrier E is preferably made in the form of a narrow ribbon or fillet and constructed of leather, rubber, linen, or any other suitable flexible material. The eye in this fillet is formed by cutting two short longitudinal parallel slits *e e* through the material a short distance apart, leaving a narrow strip or neck between. This strip is then raised from the body of the fillet, as illustrated in Fig. 3, forming a neat and effective eye, through which the thread may be passed. By constructing the eye in this manner the thread draws fairly through it without having to make twists or turns and is always carried squarely over the top of the pile-wire or forming-wire C, causing a minimum amount of friction on the yarn. By constructing this carrier of a fillet of thin and pliable glove-kid it is found in practice to stand long and hard usage, for this purpose wearing many times longer than the linen string used by the old method and produces most satisfactory results.

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

1. A carrier for doup-weaving constructed of a fillet or narrow ribbon of flexible material, two parallel slits through said ribbon, the material between said slits being raised to form an eye through which the thread may be rove.

2. A carrier for doup-weaving constructed of a narrow ribbon of thin flexible leather, two parallel longitudinal slits through said ribbon leaving a narrow neck of material between them, said neck being raised to form the eye, substantially as described.

3. In doup-weaving, a carrier constructed of a narrow ribbon of thin flexible material, two parallel longitudinal slits through said ribbon leaving a narrow neck of material between them, said neck being raised to form the eye, through which eye the pile-thread is rove, substantially as described.

In testimony whereof I have hereunto set my hand this 18th day of August, A. D. 1903.

WILLIAM G. HARTLEY.

In presence of—

EDWARD P. WALLACE,
H. F. CAREY.