

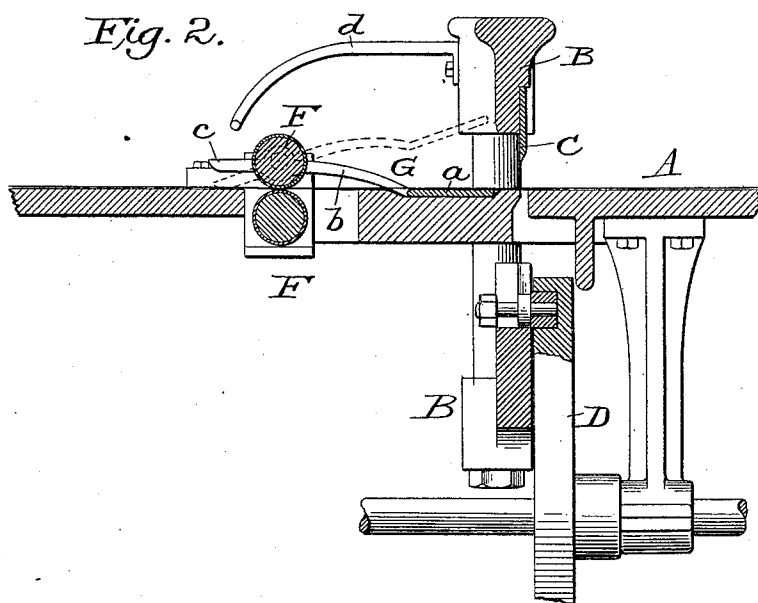
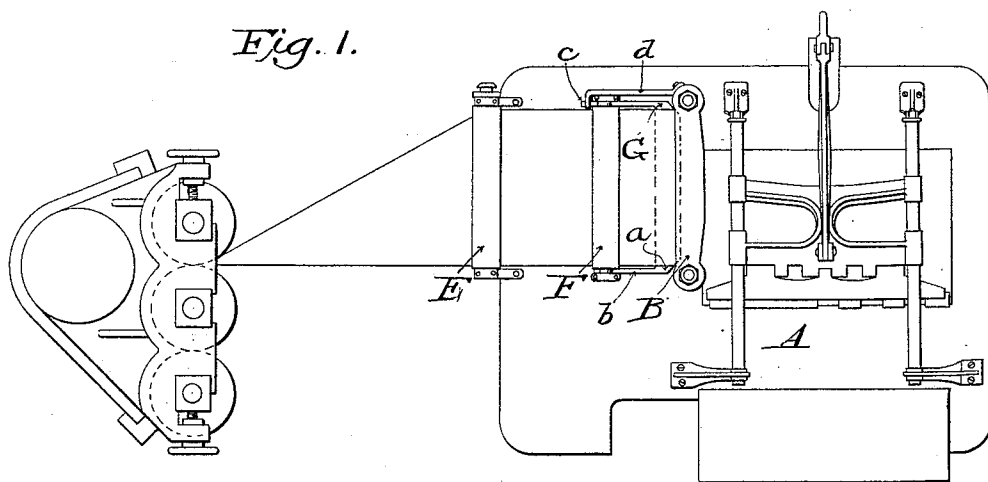
(No Model.)

W. H. KERR.

TAKE-UP DEVICE FOR CLOTH CUTTING MACHINES.

No. 482,128.

Patented Sept. 6, 1892.



Witnesses:

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UNITED STATES PATENT OFFICE.

WILLIAM H. KERR, OF ILCHESTER, MARYLAND.

TAKE-UP DEVICE FOR CLOTH-CUTTING MACHINES.

SPECIFICATION forming part of Letters Patent No. 482,128, dated September 6, 1892.

Application filed May 31, 1892. Serial No. 434,987. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. KERR, a citizen of the United States, residing at Ilchester, in the county of Howard and State of Maryland, have invented certain new and useful Improvements in Take-Up Devices for Cloth-Cutting Machines, of which the following is a specification.

My invention relates to bag-machines, and is designed more particularly for application to the machine heretofore invented by me and set forth in Letters Patent No. 445,351, dated January 27, 1891, to which reference may be had for matters not directly involved in the present invention.

The invention consists in a take-up device located between the knife or cutter which severs the bag length from the web or fabric and the proximate feed-roll, whereby I am enabled to use a continuously-rotating instead of an intermittently-acting feed-roll at that point.

Figure 1 is a diagrammatic plan view intended to show the general location and arrangement of parts; Fig. 2, a vertical section taken transversely through the feed-rolls and the cutting-blade.

Under the construction set forth in the above-mentioned patent it was necessary to employ next the blade or cutter a feed-roll which should operate while the blade was at rest, but should itself come to and remain at rest during the act of cutting the blank from the web or sheet. By thus stopping the feed-roll the accumulation of material against or under the blade, and consequently the danger of severing too much material or of making an irregular cut, was obviated; but it became necessary to nicely time the movements of various parts and to give the feed-roll a rate of rotation sufficient to take up the material which accumulated on the side farthest from the blade or cutter. I now dispense entirely with the intermittently-acting roller and employ instead a plate or bar, which normally lies flush with the bed or table of the machine, beneath the web or fabric, but which as the blade or cutter descends and begins to bear upon the fabric rises at a rate just sufficient to take up the slack or accumulation

and which as the blade again rises drops back to place and permits the material to move forward beneath the blade or cutter.

Referring now to the drawings, A indicates the bed or table of the machine; B, a vertically-reciprocating cutter-frame provided with a knife or blade C and actuated by a cam-wheel D, as in the patent aforesaid.

E indicates one of a pair of feed-rolls at the forward edge of the bed or table A, and F F indicate a pair of feed-rollers located a short distance in advance of the cutter, the rolls E and F corresponding to rolls D⁵ and E⁴ of the patent noted.

G indicates the take-up, located between rolls F and cutter B C and consisting merely of a flat plate or bar *a*, carried by arms *b*, pivotally supported either upon the shaft of the upper roll F or upon pivots of their own, as found expedient. The plate or bar *a* is preferably arranged to sink into a recess in and to lie flush with the surface of bed or table A, as shown, though this is not essential. One or both of the arms *b b* is or are extended beyond the pivot or fulcrum to form a tail *c*, which is arranged directly in the path of an arm *d*, carried by the cutter-frame B, as shown in Fig. 2. As the cutter descends, the arm *d*, striking the tail *c*, lifts the arms *b*, and consequently the plate *a*, causing the latter to rise beneath and to carry upward the web or fabric, keeping the same from crowding forward against or beneath the cutter. As the cutter rises, the take-up falls back to place and the fabric is fed forward, as before. It is manifestly immaterial what particular form be given to the arms *b* and *d* or at what precise point the pivots be located, provided only that they be so formed and arranged as to insure the taking up of the slack or surplus at the point and time indicated. So, too, the plate *a* may be merely a wire or rod, though I prefer a flat plate.

The term "take-up" is employed throughout this specification to indicate a moving device which serves by its lifting action to take up any slack or surplus that may accumulate between the feed-roll and the cutter, as contradistinguished from clamps, which serve to hold the web against movement past a given

point, or fixed and inert guides, which merely vary the travel of the web in different portions of its width.

Having thus described my invention, what I claim is—

1. In combination with a bed or table and a feed-roll adapted to advance a sheet or web of material over the same, a cutter and a take-up device located between the cutter and the feed-roll and serving by its movement to take up the slack of material accumulating between the feed-roll and the cutter during the cutting operation.

2. In combination with a bed or table A, reciprocating cutter C, and feed-roll F, an in-

termittent take-up G, substantially as and for the purpose set forth.

3. In combination with bed or table A and feed-roll F, cutter-frame B, provided with cutter C and arm *d*, and a take-up G, consisting of arms *b*, plate or bar *a*, and tail *c*, the arms being pivotally supported and the tail *c* being located in the path of arm *d*, substantially as set forth.

In witness whereof I hereunto set my hand in the presence of two witnesses.

WILLIAM H. KERR.

Witnesses:

GEO. E. TAYLOR,
C. H. ANDREWS.