

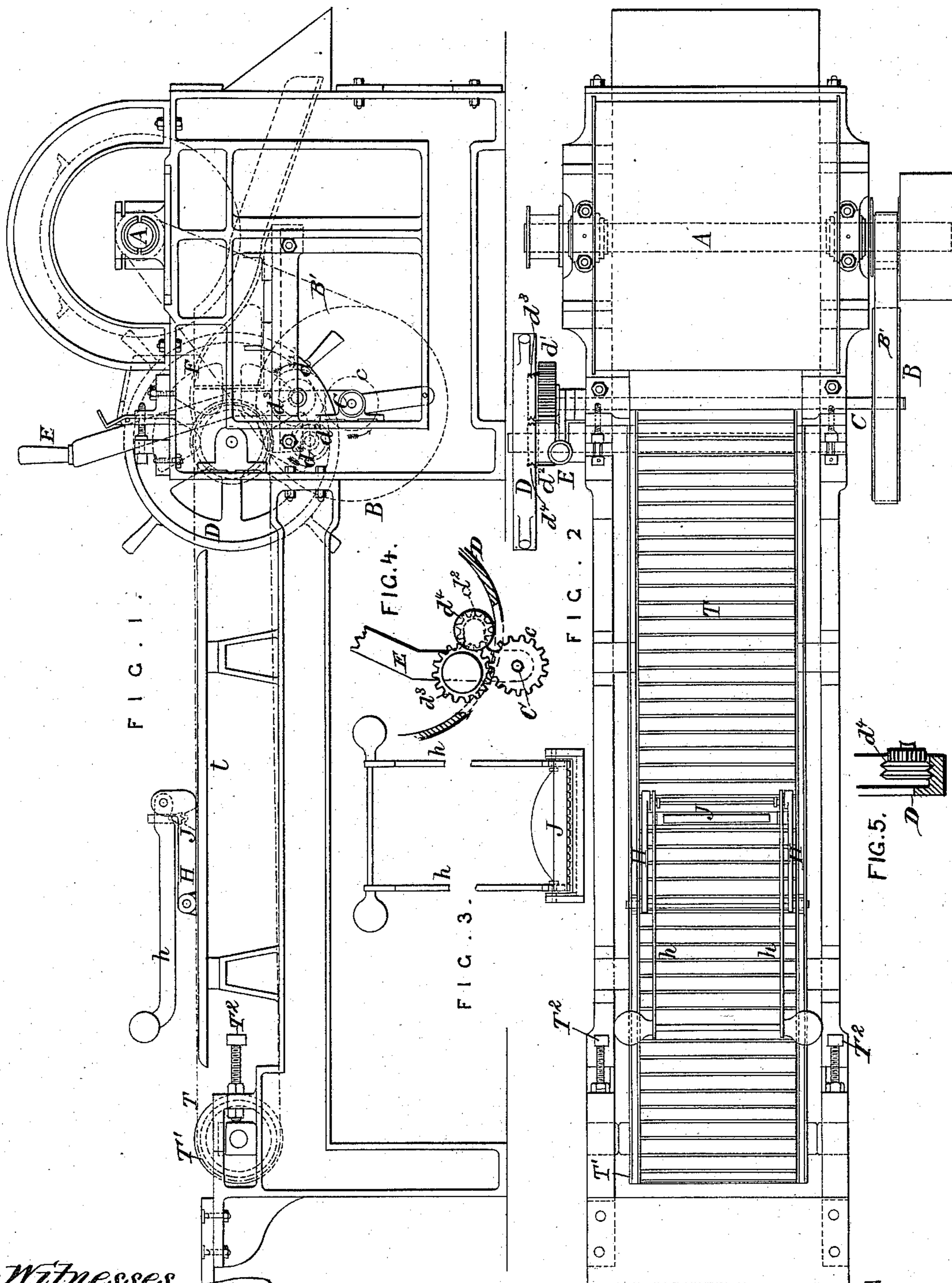
(No Model.)

A. H. DEATH.

FEEDING APPARATUS FOR SCUTCHING OR FIBER CLEANING MACHINES.

No. 385,300.

Patented June 26, 1888.



Witnesses,

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UNITED STATES PATENT OFFICE.

ALFRED H. DEATH, OF LEICESTER, ENGLAND.

FEEDING APPARATUS FOR SCUTCHING OR FIBER-CLEANING MACHINES.

SPECIFICATION forming part of Letters Patent No. 385,300, dated June 26, 1888.

Application filed May 4, 1887. Serial No. 237,106. (No model.) Patented in England July 2, 1886, No. 8,706; in France March 15, 1887, No. 182,205; in Spain July 7, 1887, Nos. 6,949/11,096, and in India August 5 and September 16, 1887, Nos. 89 and 1,210.

To all whom it may concern:

Be it known that I, ALFRED HENRY DEATH, a citizen of England, residing at Beresford House, Leicester, in the county of Leicester, England, have invented a new and useful Improvement in Feeding Apparatus for Scutching or Fiber-Cleaning Machines, (for which I have obtained a patent in Great Britain, dated July 2, 1886, No. 8,706; in France, dated March 15, 1887, No. 182,205; in Spain, dated July 7, 1887, Nos. 6,949/11,096; and in India, dated August 5 and September 16, 1887, Nos. 89 and 1,210,) of which the following is a specification.

This invention relates to an improved feeding apparatus for fiber-scutching machines, whereby the fibrous leaves or stems can be fed into the machine without danger to the operator from the proximity of his hands to the scutching-wheel, this feeding apparatus being more particularly applicable to machines such as are described in the specification to the United States patent granted to W. E. Death, dated February 16, 1886, No. 336,395.

According to my invention, an endless apron or carrier is mounted on wheels or rollers, the roller at one end being mounted in boxes made adjustable by set-screws, so as to take up slack, and at such a height that the upper surface of the apron or carrier is level with and faces the feeding-table of the machine, which is preferably convex or rounded. The leaf or stem or set of these while being scutched is secured to this apron or carrier by means of a clip or holder fixed thereon, this clip being so arranged that the more the stems drag on it the more tightly it grips them. The apron or carrier is advanced or retracted by moving one of the rollers.

The action of the apparatus is as follows: The apron or carrier is moved back so that its holder is at a suitable distance from the machine. A leaf or stem, or a set thereof, being then placed upon it, it is held in position by the holder or clip before mentioned. The apron or carrier being then moved forward, the stem or leaf or set thereof is fed to the scutching-machine and a certain length is scutched and cleaned. It is then withdrawn, and being reversed is again laid upon the apron or carrier and secured thereon by the

clip, and is advanced so that the remainder of the stem or leaf, or set thereof, is scutched or cleaned. When this operation is completed, the apron or carrier is again retracted, the scutched leaves or stems are removed, and a fresh leaf, stem, or set thereof, is operated on, as above described.

Figure 1 of the accompanying drawings is a side view, and Fig. 2 is a plan, of feeding apparatus, according to my invention, applied to a scutching-machine of the kind described in the specification above referred to. Fig. 3 is a broken front view of the clip or holder with its levers raised, showing the serrated jaw for holding the material treated, this jaw being represented as if it were raised a little from the lower in order that its serrated edge may be seen, which would otherwise be concealed in the groove of the lower jaw. Fig. 4 is a detail view of a portion of the mechanism for reversing the direction of motion of the apron or carrier. Fig. 5 is a sectional view of a portion of the internally-grooved wheel and one of the grooved pinions forming part of said mechanism.

The spindle C, which, by a pulley, B, and belt, B', is driven from the spindle A of the scutching-machine, has fixed on it a toothed pinion, c, with which gears a pinion, d', having a second pinion, d'', gearing with it. Both these pinions d' d'' are mounted on a lever, E, which can be moved by hand, and on the axes of the pinions d' d'' are fixed grooved friction wheels or pinions d' d'', either of which by moving the lever E can be made to bear against a grooved internal rim of a wheel, D, that has handles, so that it can be turned by hand when desired. On the axis of the wheel D are chain-wheels round which pass chains carrying transverse bars T, forming an endless apron or carrier traveling along a supporting-guide, t, at about the level of the rounded feeding-table F of the scutching-machine. The apron or carrier also passes around a roller, T', having its journal-boxes adjustable by set-screws T'', so that the said pulley can be adjusted to and from the axis of the wheel D to tighten the apron or carrier. On the apron or carrier is placed the clip or holder H, on which are jointed two side levers, h, holding down the

upper of two transverse jaws, J, one of which is serrated, and between which the material that is to be scutched is held. The levers *h* being raised the upper jaw J is lifted by hand and a layer of the fibrous material is laid between the jaws and is firmly gripped by them on lowering the levers *h*. The lever E being now pushed forward so as to press the friction-wheel *d*³ against the rim of the wheel D, the chain-wheels are made to revolve, causing the apron or carrier T and clip H to advance, and thus the layer of fibrous material is fed over the feed-table F to be acted on by the scutching-machine. This goes on until the clip H has approached the end of its forward course, whereupon the lever E is moved back, disengaging wheel *d*³ from the wheel D and engaging wheel *d*⁴ therewith. The wheel D is now driven and the apron or carrier T is moved in the opposite direction, and the clip H with the fibrous material is retracted. On now opening the jaws J the fibrous material can be taken out and reversed in position, so as to be held by the parts already scutched and to have scutching performed on the parts by which it was previously held. When the lever E is in its middle position, neither of the friction-wheels *d*¹ *d*³ bearing against the rim of the wheel D, this wheel can be turned by hand, so as to advance or retract the clip H, as may be desired.

Although I have described the feeding apparatus as applied to a particular kind of

scutching-machine, obviously it is applicable generally for the feeding of fibrous stems and the like toward machines of other kinds and retracting them therefrom.

Having thus described the nature of my invention and the best means I know for carrying the same into practical effect, I claim—

1. In a feeding apparatus for scutching or fiber-cleaning machines, the combination of a flexible endless apron, a clip or holder mounted on said apron and provided with side levers, a pair of jaws, one of which is held down by said levers, and mechanism for moving the apron back and forth, substantially as described.

2. In a feeding apparatus for scutching or fiber-cleaning machines, the combination of an apron or carrier, T, the clip or holder H, the side levers, *h*, hinged to said clip or holder, the transverse jaws J, the upper one of which is held down by said levers, and means for moving the apron or carrier back and forth, substantially as described.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 15th day of April, 1887.

ALFRED H. DEATH.

Witnesses:

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