4 Sheets--Sheet 1.

J. WATTEAU.

Machinery for Pulling Wool.

No. 141,972. Patented August 19, 1873.

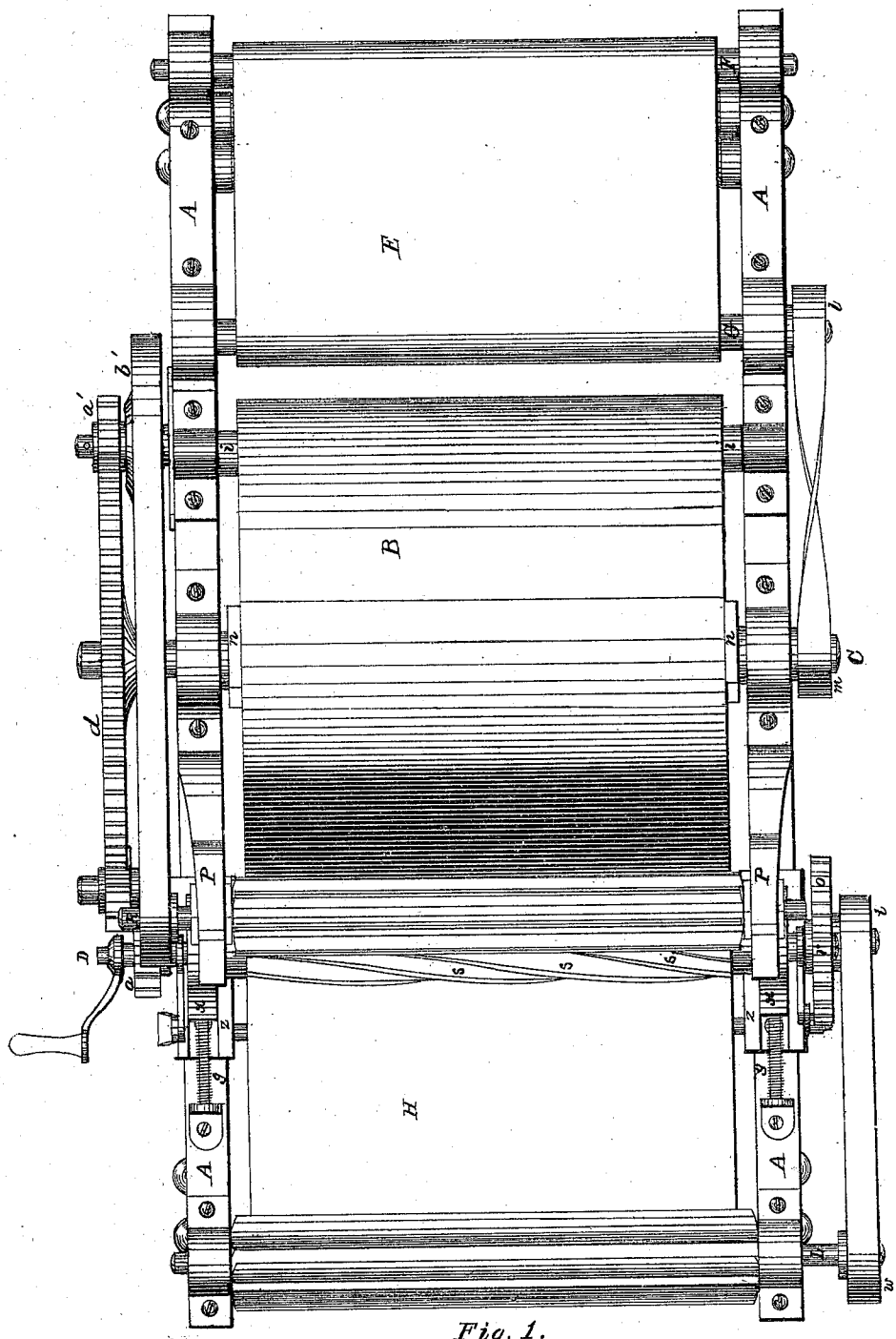

Fig. 1.

Witnesses.
L. N. Brook.
Alonzo Hughes

Inventor.
Jules Watteau
By his Attorney
Chas. F. Fansburn

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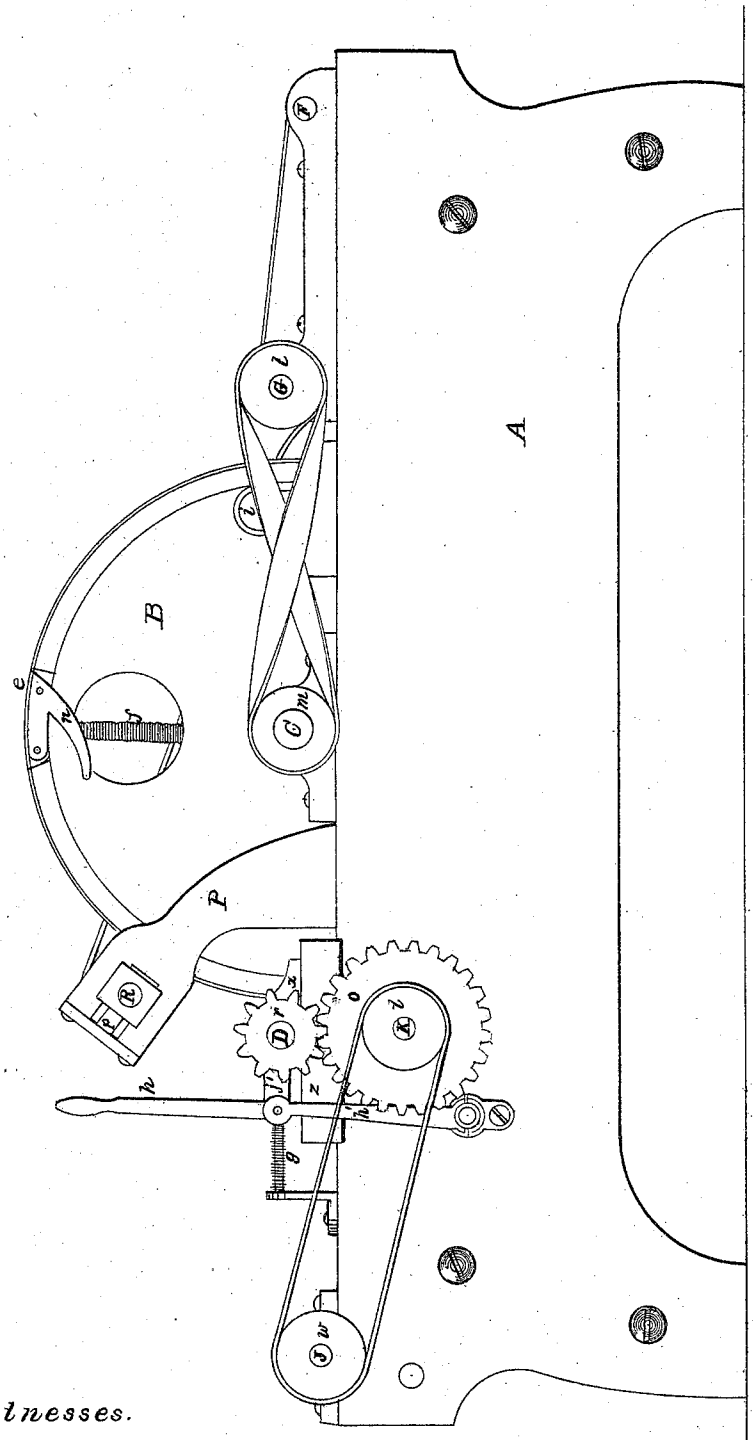

Fig. 2.

Witnesses.

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J. WATTEAU.

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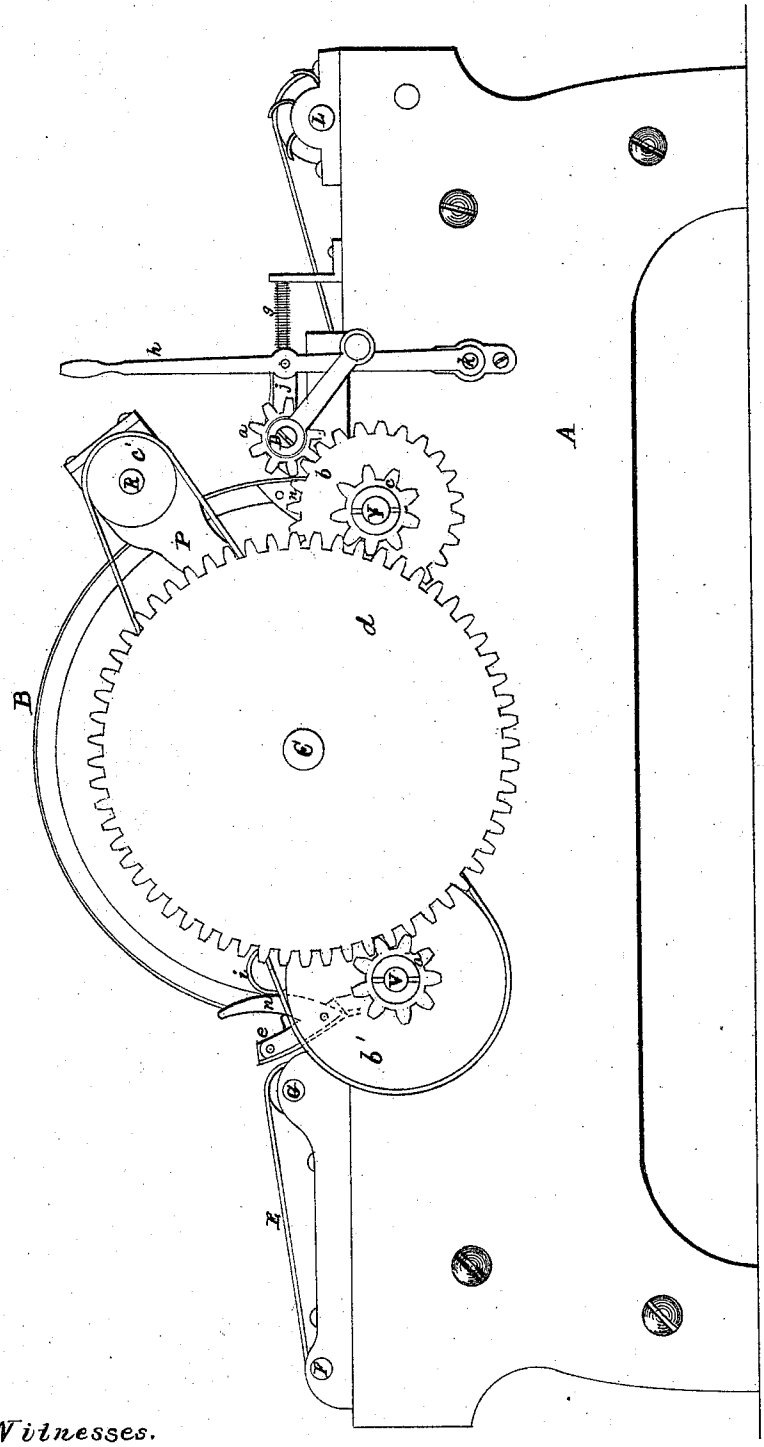

Fig. 3.

Witnesses.

L. A. Brook

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4 Sheets--Sheet 4.

J. WATTEAU.

Machinery for Pulling Wool.

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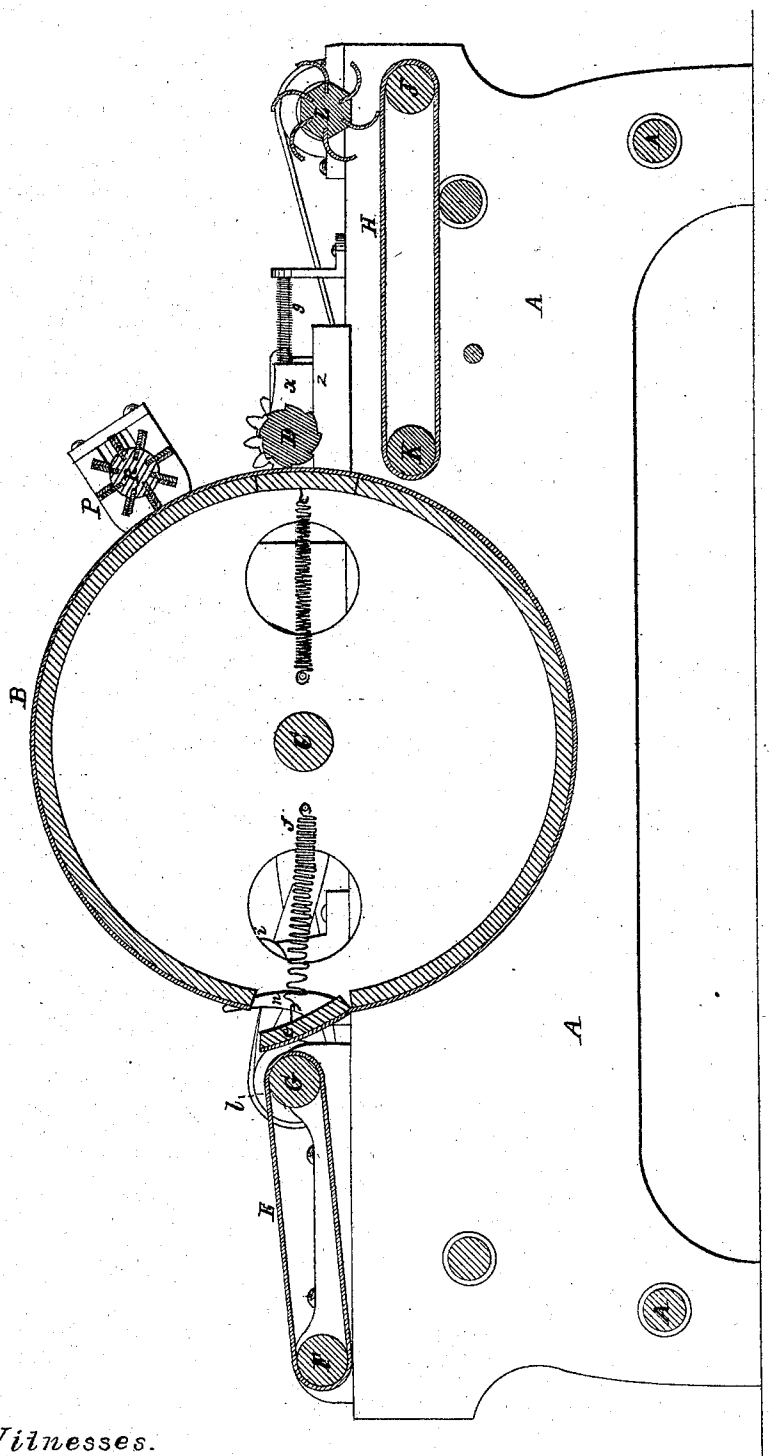

Witnesses.

L. N. Trivk.

Alonzo Hughes

Inventor.

Jules Watteau

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UNITED STATES PATENT OFFICE.

JULES WATTEAU, OF ANTWERP, BELGIUM.

IMPROVEMENT IN MACHINERY FOR PULLING WOOL.

Specification forming part of Letters Patent No. **141,972**, dated August 19, 1873; application filed October 21, 1872.

To all whom it may concern:

Be it known that I, JULES WATTEAU, of Antwerp, in Belgium, have invented certain Improvements in Machines for Pulling Wool; and I do hereby declare the following to be a full and correct description of the same, reference being had to the accompanying drawings, in which—

Figure 1 is a plan. Fig. 2 is a side elevation. Fig. 3 is an elevation from the opposite side. Fig. 4 is a sectional elevation.

The present invention is an improvement upon the invention described in my patent dated December 5, 1871, and numbered 121,565.

A is the frame of the machine. B is the revolving drum, upon which the skins lie while operated upon. The drum revolves upon a shaft, C, which has bearings in the frame, as shown, and which derives its motion from the main shaft D, as shown, through the gear-wheels *a b c d*, the wheel *a* being fast to the main shaft, the wheels *b* and *c* being fast to each other and revolving upon an axis, Y, which is secured to the frame, as shown, and the wheel *d* being fast to the shaft D, and consequently revolving with the drum. The drum has two doors or catches, *e e*, each of which extends entirely across the drum. They are opened by cams *n* striking against a hole, *i*, in the revolution of the drum, and are closed by springs *f*, which are within the drum. The catches secure the sheep-skin to the drum by the head and legs, the drum being of sufficient diameter to allow two skins to be secured to it, one by each catch, so that the skins shall not interfere with each other in the operation. The main shaft D has bearings in blocks *x x*, which are secured to and slide in grooved plates *z z* attached to the frame. The main shaft D and the drum B revolve in opposite directions, and the former has plates or strikers *s s s* attached to it, as shown, which pull the wool from the skin. These plates or strikers are made of metal or wood, and well polished, that they may not injure the face of the skin. A portion of the elasticity, however, provided for in the former patent, is here obtained by covering the drum B with rubber cloth or other elastic covering. Springs *g g* tend to keep the spiral plates *s* in contact with the drum, or rather with the skins upon the drum, the springs pressing upon the sliding blocks, as shown. The blocks may be drawn back by the hand-lever *h*, which is connected to the main shaft by a link, *j*. (See Fig. 2.) The hand-lever just referred to is pivoted to a rod, *k*, which extends across the machine, as shown. The main shaft C being thus drawn back by the hand-lever, the wheels *a* and *b* are thrown out of gear. The arm *h* and link *j* are duplicated upon the other side of the machine, excepting that the second arm is not long enough to serve as a hand-lever, the duplicated parts in the drawings being marked, respectively, *h'* and *j'*. E is an endless feed-table, in my machines made of slats of wood, but shown in the drawings as if made of cloth. It runs upon two revolving shafts, F and G, both having bearings in the frame, as shown, and the latter deriving its motion through the pulley *l*, connected by a belt with the pulley *m* upon the shaft C. H is a corresponding endless delivery-table, operated by the revolving shafts J and K, both having bearings in the frame, as shown, and the latter deriving its motion through its gear-wheel O meshing with the gear *r* upon one end of the main shaft D. L is a revolving shaft, having bearings in the frame, as shown, and having bent plates or wings like paddles, as shown, for rolling up the fleece as it advances over the delivery-table against the bent plate. A pulley, *t*, upon one end of the shaft K gives motion to the shaft L through a belt and the pulley *w*, as shown. P P are two brackets above the frame, supporting a revolving shaft, R, which is furnished with beaters or strikers, constructed and secured in place in the same manner as the strikers or beaters described in my patent before referred to. The shaft R has bearings directly in blocks which slide in the brackets P P, as shown, the beaters being kept in contact with the drum by means of springs *p p* acting against the blocks. The office of the shaft R and its plates is to pull any wool which may have escaped the spiral plates upon the main shaft D. The shaft R has a very rapid motion, which it gets from the drum by means of the gear-wheel *d* meshing with the

wheel a' revolving upon an axis, V, attached to the frame, as shown, the wheel a being fast to a pulley, 6′, which also revolves upon the axis V, and which is connected by a belt with a pulley, c', upon the shaft R, as shown.

If the shaft D is used simply as a main shaft, the plates s being removed, the shaft R with its plates will be found very effective to pull the wool.

In combination with the drum B, the shaft R constitutes a great improvement upon the machine described in my former patent.

The machine above described is operated as follows: A workman feeds the skins into the machine over the feed-table, with the woolly side next the table, so that one of the catches seizes them by the head and forefeet. The drum, revolving, carries the skin down under it, so that, when it comes up at the other side of the machine, the woolly side is out, and is acted upon by the plates upon the shaft D, as above described. The fleece falls upon the table H, and is rolled up by being carried against the revolving paddle-shaped wings upon the shaft L. The skin is taken out of the machine, when the catch opens to receive a new skin.

I am aware of the patent granted to Mellen Bray, August 22, 1865, and of the two patents granted to Samuel S. Weed, numbered 49,811 and 49,839 of September 5, 1865, and make no claim to anything described or shown therein. The machines described in said patents are constructed and organized only for the preparation of hides or skins, no provision being made for even gathering the hair, and much less is any regard paid to the preservation of a fleece, or to the sorting of the wool, should a sheep-skin be run through either of these machines. My machine, on the contrary, is organized with especial reference to the condition of the wool after it is pulled. The fibers are not matted together or entangled with each other by passing through rolls, but fall from the strikers in substantially the same condition and positions relatively to each other which they occupied on the sheep. The fleece comes off nearly entire, and may, therefore, be easily sorted. Provision is also made for rolling it up.

I claim—

1. The feed-table E, drum B, provided with catches e, shaft D, with spiral plates s, endless table H, and paddle-shaft L, combined and arranged substantially as described, to pull and roll up the fleece of a sheep-skin.

2. The endless tables E and H, drum B, provided with an automatically-operating catch, and a shaft with striking-plates to pull and preserve entire the fleece of a sheep-skin, substantially as described.

3. The shaft L with its paddle-shaped wings to roll the fleece brought against it by the table, substantially as described.

Witnesses: JULES WATTEAU.
CH. VAN LIEBERGEN,
MELDERS CHAS.