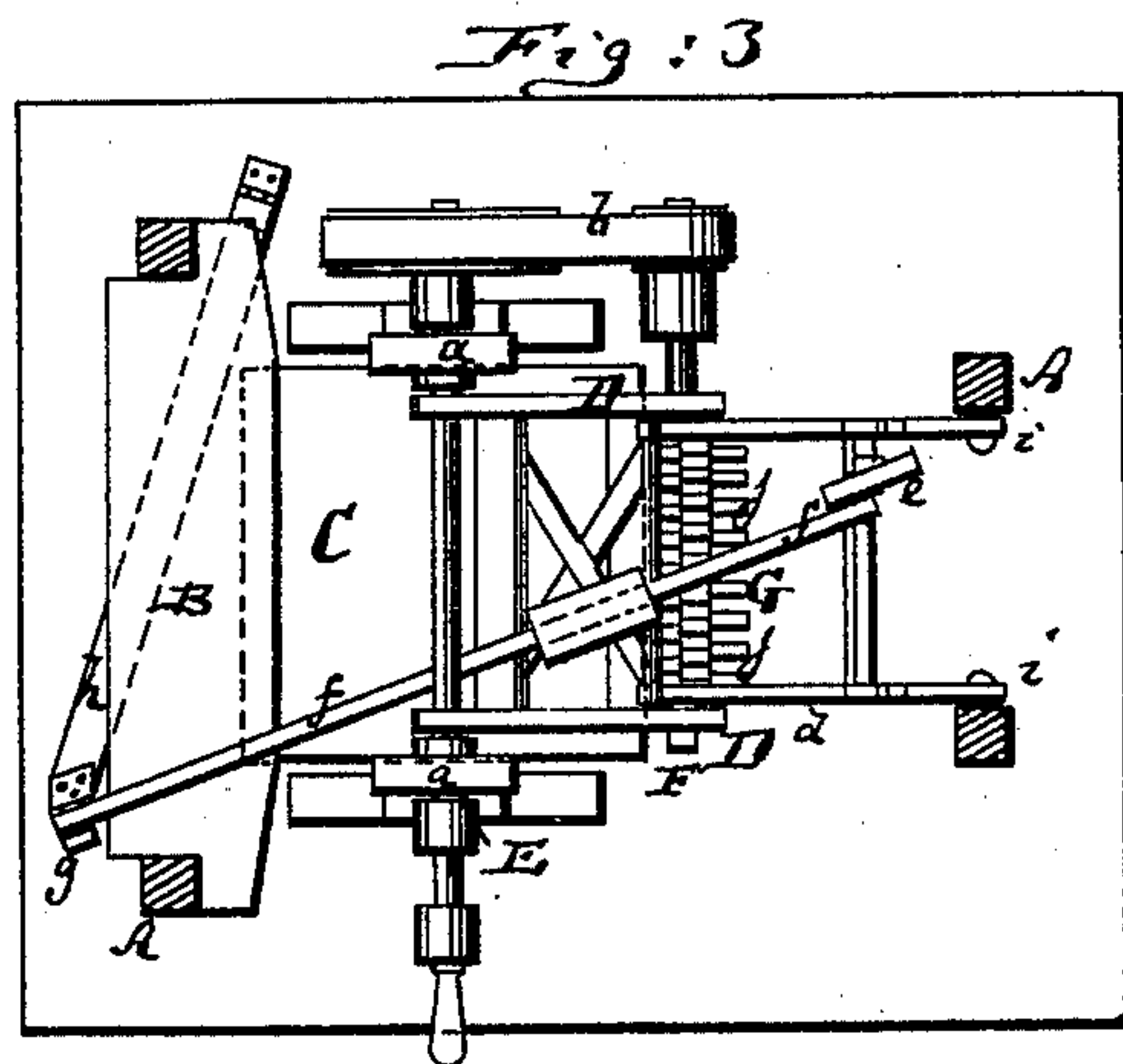
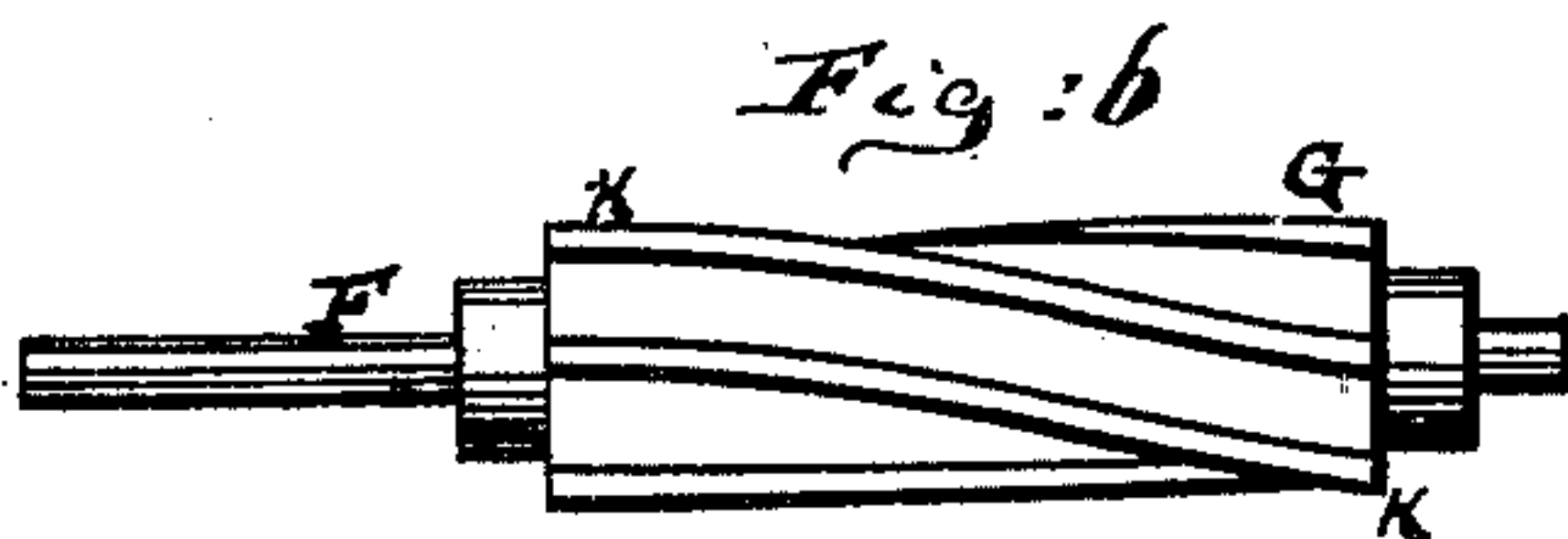
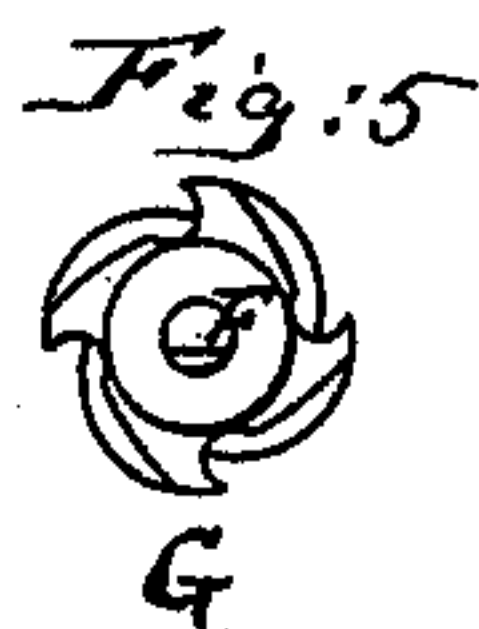
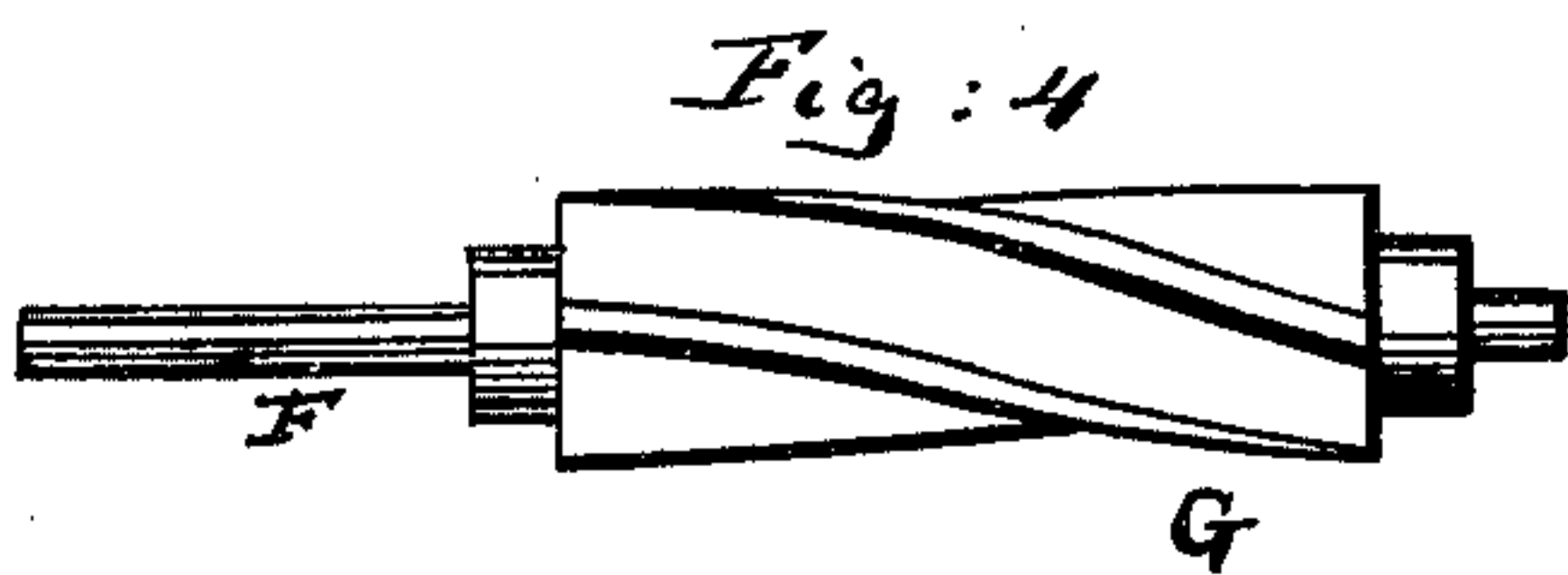
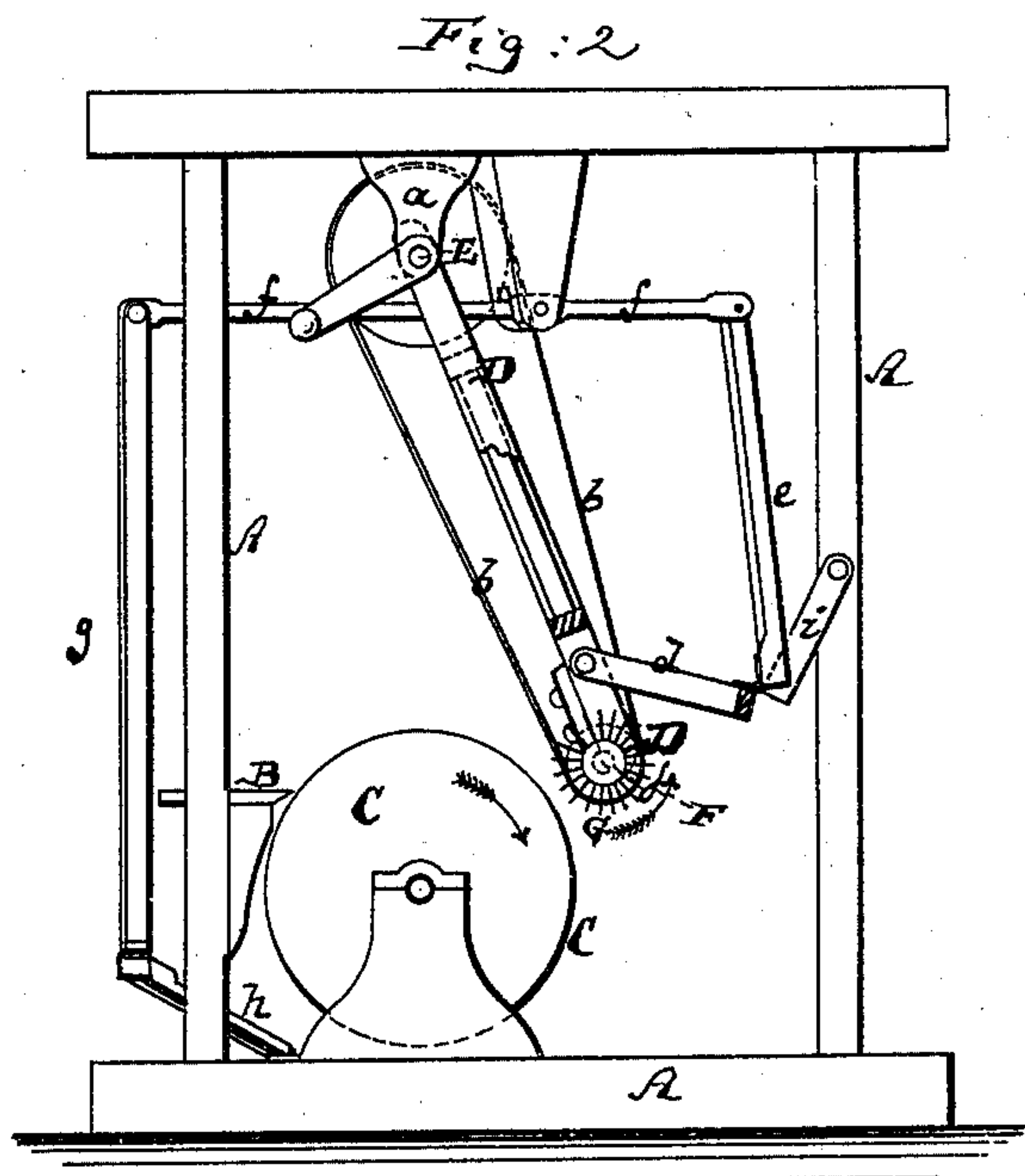
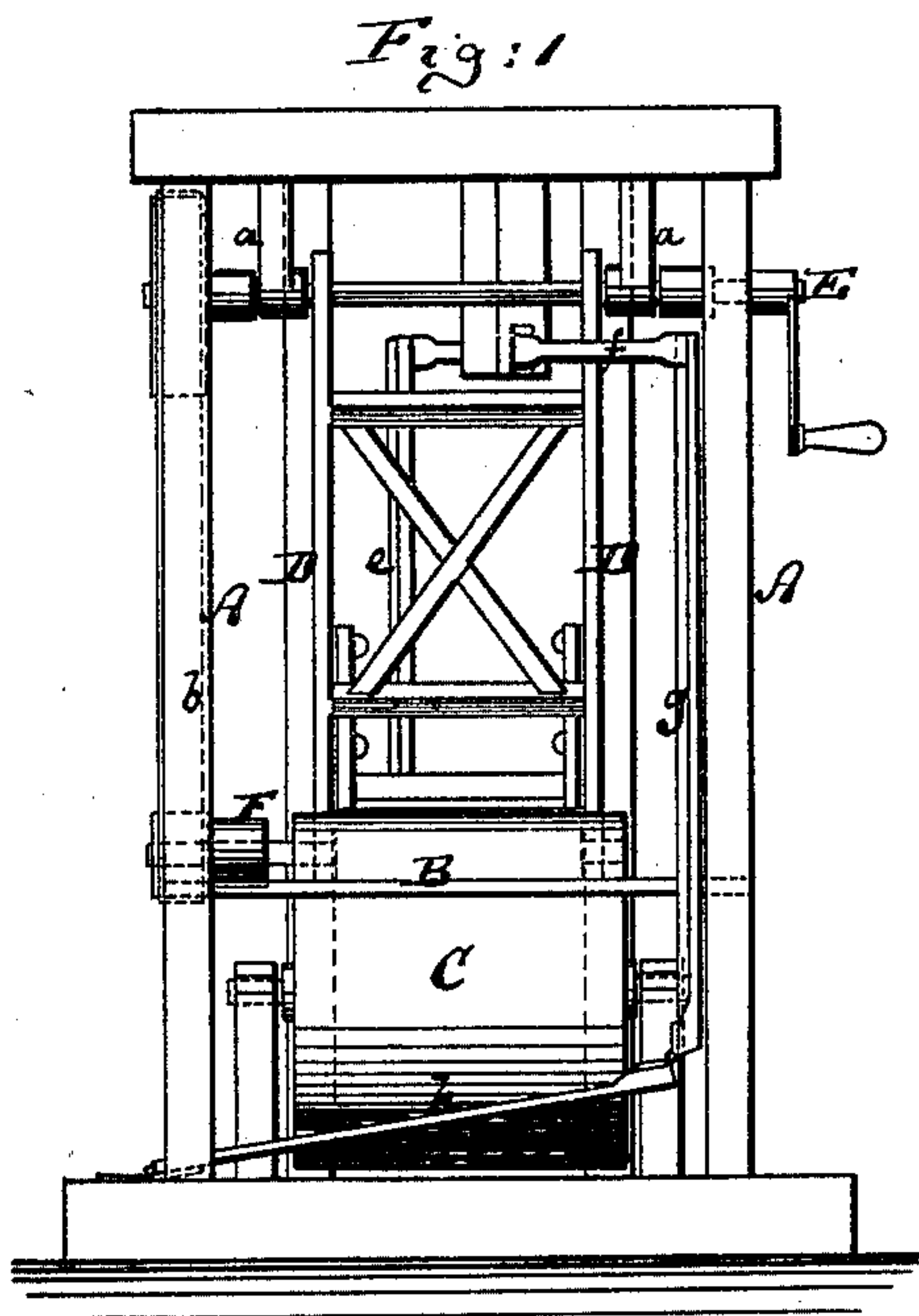


C. ROSE.
HIDE-SCOURING MACHINE.

No. 170,771.

Patented Dec. 7, 1875.



Witnesses:
A. Moraga.
O. Weidner

Inventor:
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UNITED STATES PATENT OFFICE.

CARL ROSE, OF NEW YORK, N. Y.

IMPROVEMENT IN HIDE-SCOURING MACHINES.

Specification forming part of Letters Patent No. **170,771**, dated December 7, 1875; application filed November 15, 1875.

To all whom it may concern:

Be it known that I, CARL ROSE, of the city of New York, county and State of New York, have invented an Improved Hide Scouring and Cleaning Machine, of which the following is a specification:

Figure 1 is a front elevation of my improved scouring and cleaning machine. Fig. 2 is a side elevation of the same. Fig. 3 is a top view, partly in section, of the same. Fig. 4 is a side view, and Fig. 5 an end view, of one of the scraping-rollers used on the machine. Fig. 6 is a side view, and Fig. 7 an end view, of another style of roller used on the machine.

Similar letters of reference indicate corresponding parts in all the figures.

This invention relates to a new machine for scouring, fleshing, and cleaning hides preparatory and subsequent to the tanning process, for removing impurities from the flesh side of the hides, breaking the hides to facilitate the tanning process, removing the hair when desired, and rubbing or pressing them after liming to express the surplus lime used in the process of tanning.

My invention consists, principally, in the employment of a rotary bed for the hide to be scoured or rubbed, in place of the stationary beds heretofore used. The invention consists, also, in improvements in the arrangement of the pendulum-frame in which the scouring-roller is suspended, and in an improved steel scouring-brush, all as hereinafter more fully described.

In the accompanying drawing, the letter A represents the stationary frame-work of the machine, of which the upper part may be formed by the ceiling of the room in which the machine is set up. B is a fixed table, on which the operator stands and adjusts and holds the hides. C is a drum, hung horizontally, or nearly so, directly in front of the table, so that the latter is between the drum and the operator. The drum is of a length sufficient to receive that portion of the hides which is to be acted upon at one time, and is made of suitable material. Its circumference may, if desired, be rendered more or less elastic by a covering of rubber or equivalent substance, or fabric. D is a pendulum-frame, suspended from a horizontal shaft, E, from the ceiling or

upper part of the frame A, and carrying at its lower part a shaft, F, upon which the scouring-roller G is mounted. The shaft E has its bearings in suitable brackets *a a*, and receives rotary motion by suitable means, and transmits its motion by a belt, *b*, or otherwise to the shaft F and roller G. But motion may be imparted to the shaft F otherwise than from the shaft E. The axis of the shaft E is almost vertically above that of the drum C, as shown in Fig. 2, and the length of the frame D such that its weight will tend to hold the roller G in contact with the drum C. If the two are thus in contact, directly or indirectly, *i. e.*, with a hide intervening, the drum C will be turned by the roller G.

The lower part of the frame D is, by a series of jointed levers, *d, e, f*, and *g*, connected with a treadle, *h*, in such manner that, by stepping on said treadle, or should it be omitted, by pulling on the lever *g*, the roller G will be tightly drawn against the drum C. By a toggle-joint, *d i*, the frame D may also be connected with the frame A, as shown, but not necessarily so, said connection being only desirable in case the frame D is too light to remain steady.

The roller G is for scouring a hide on the flesh side, fitted with a series of flat steel blades or strips *j j*, which are preferably arranged in tufts and set in the body of the roller, with their flat sides parallel to the axis thereof, so as to constitute a brushing-surface, which will effectually remove the flesh and impurities from the hide without scratching or tearing the same, and which will also break the hide, to render it properly susceptible for the tanning process, to which it is subsequently exposed.

For removing the hair or treating the flesh side of very fine skin, I propose to use a brush of whalebone or similar material, set into the roller G, or to set rubber blades into the periphery of the roller.

For various purposes, metallic rollers of the style represented in Figs. 4 and 5, or rollers with stone rubbers K K, like those represented in Figs. 6 and 7, may be placed in the frame D to act on the hide, which is placed on the drum C. Especially the style of roller last named will be useful for sleeking the hide

after it comes out of the vat, and expressing the surplus lime.

In operation, the hide is placed over the table B and drum C, and the roller G thereupon brought against it to affect it in the desired manner, the frictional contact with said roller serving to feed the hide on and with the drum C, which is turned by such friction in the direction of the arrow indicated in Fig. 2. For greater effect the hide may, after it has been fed nearly past the roller G, be pulled back by the operator against the direction of rotation of the roller, in which case the drum C will follow the motion which is imparted to the hide.

I claim as my invention—

1. The combination of the rotary bed C, with the pendulum-frame D and scouring-roller G, substantially as herein shown and described.

2. The pendulum-frame D, carrying the scouring-roller, and combined with the system of levers *d e f g*, substantially as and for the purpose herein shown and described.

3. The rotary scouring-brush G, provided with series or tufts of elastic sheet-strips *j j*, set with their faces parallel to the axis of the roller, substantially as specified.

C. ROSE.

Witnesses:

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