

(No Model.)

2 Sheets—Sheet 1.

H. A. HOUSE & S. D. CASTLE.
Treating Pelts.

No. 233,415.

Patented Oct. 19, 1880.

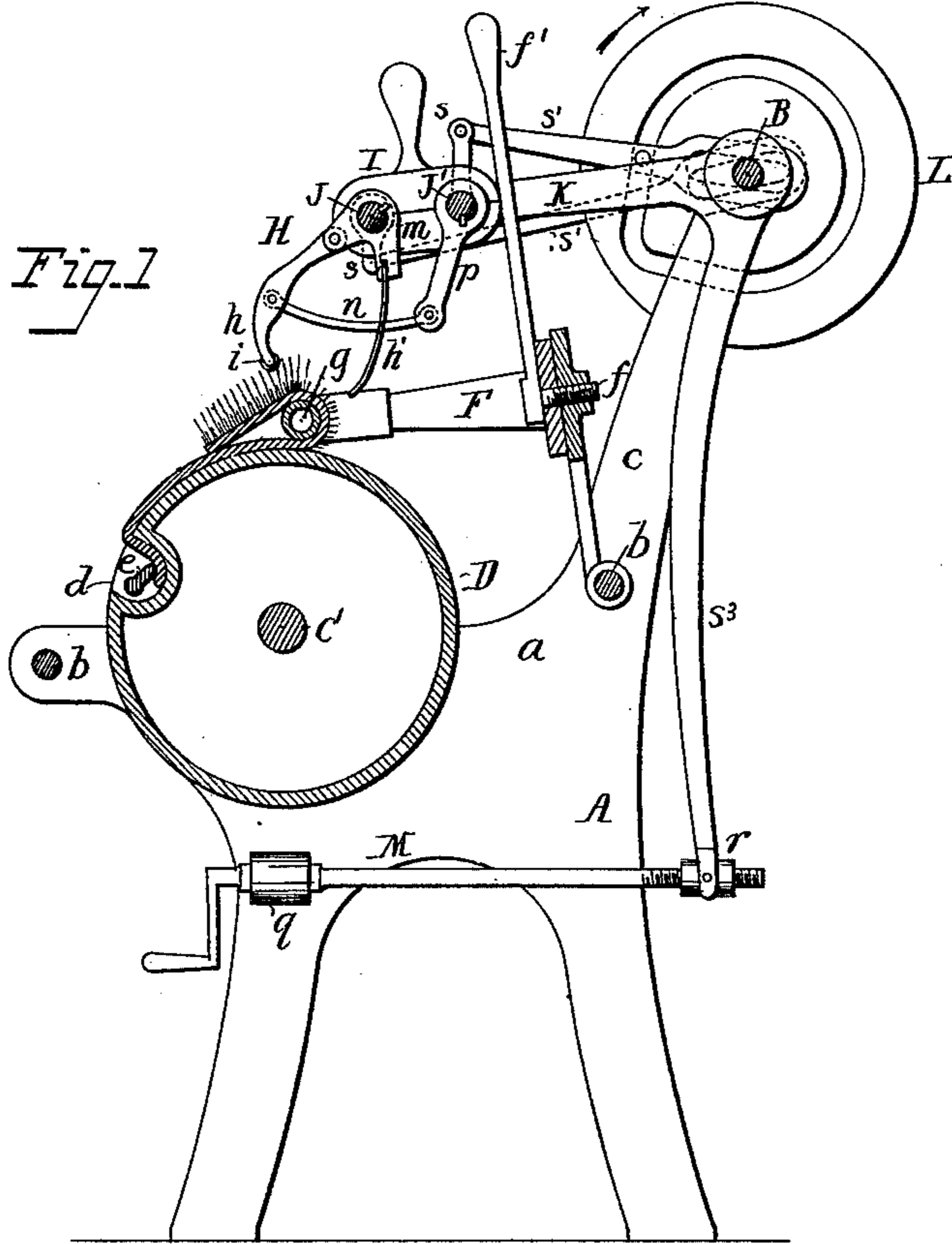


Fig. 1

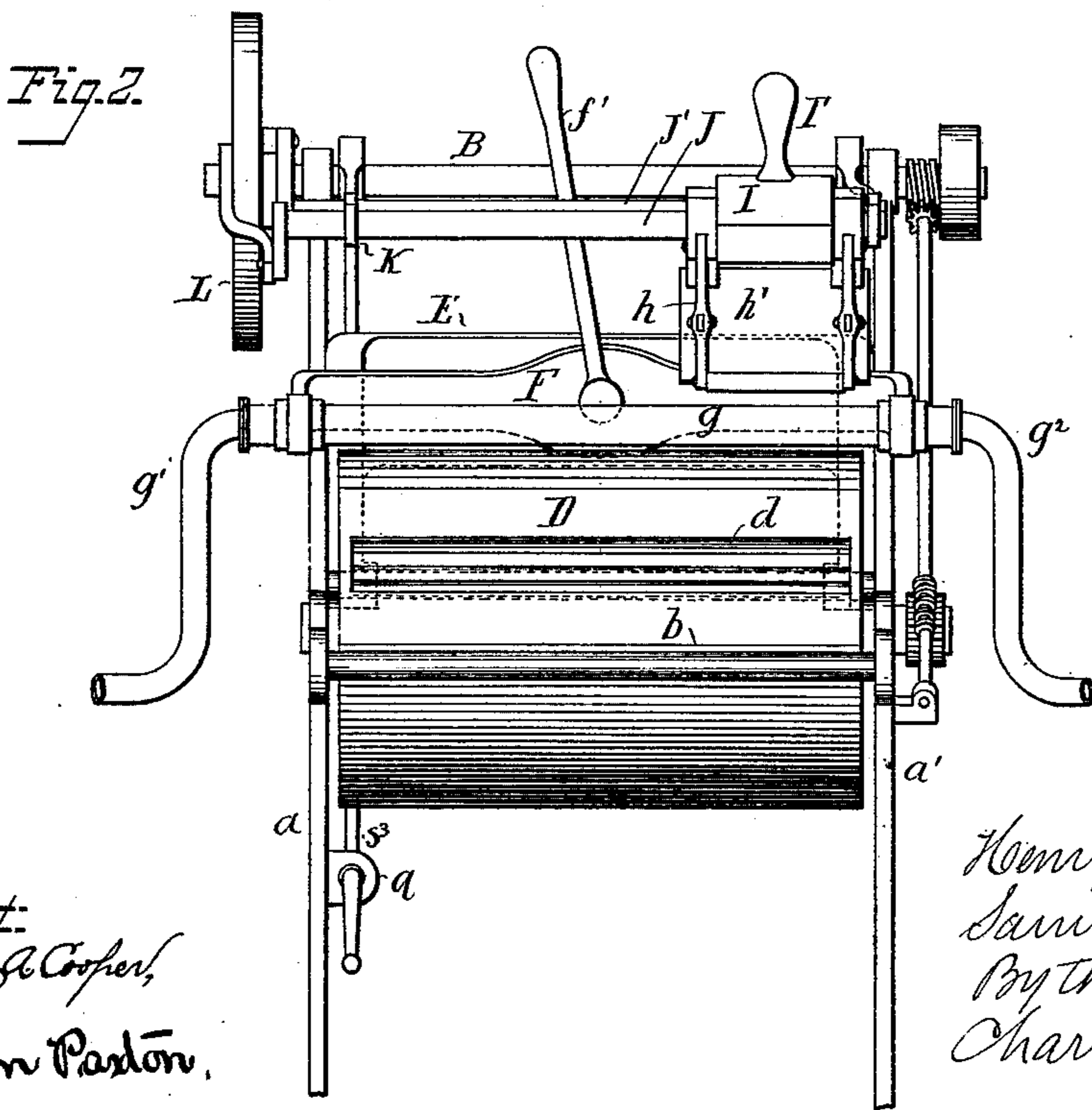


Fig. 2

Attest:
Courtney G. Cooper,
William Paxton.

Henry A. House,
Sam. D. Castle,
By their attorney
Charles E. Foster.

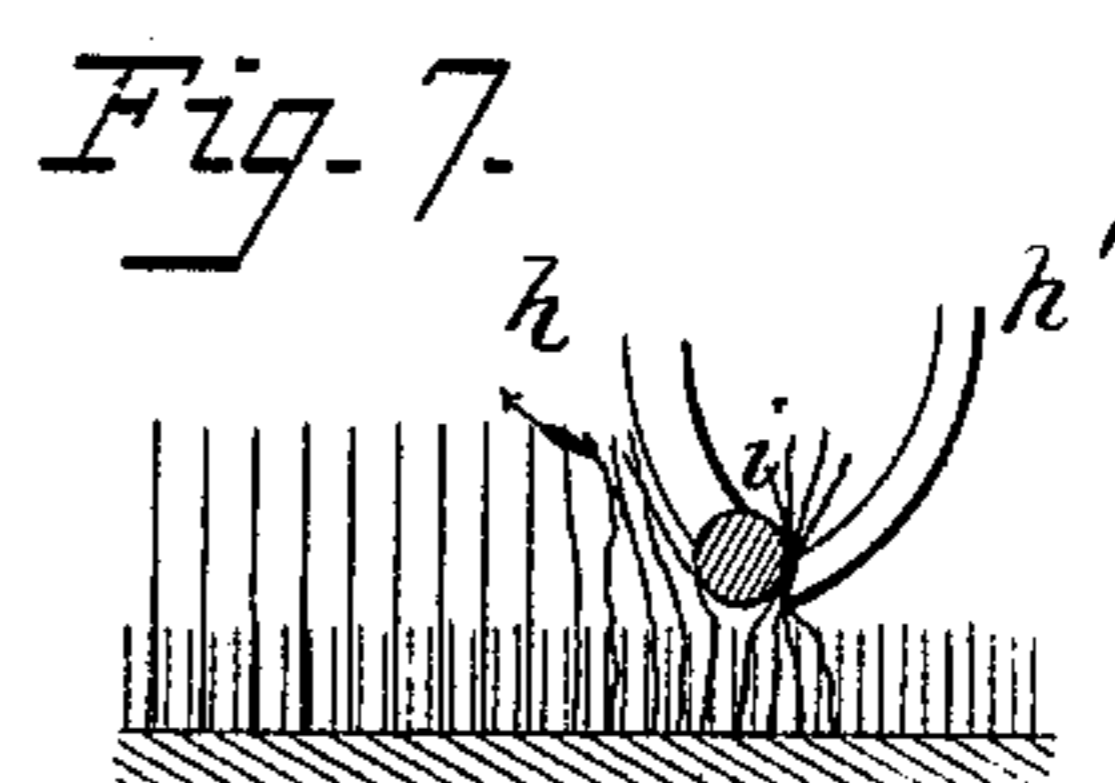
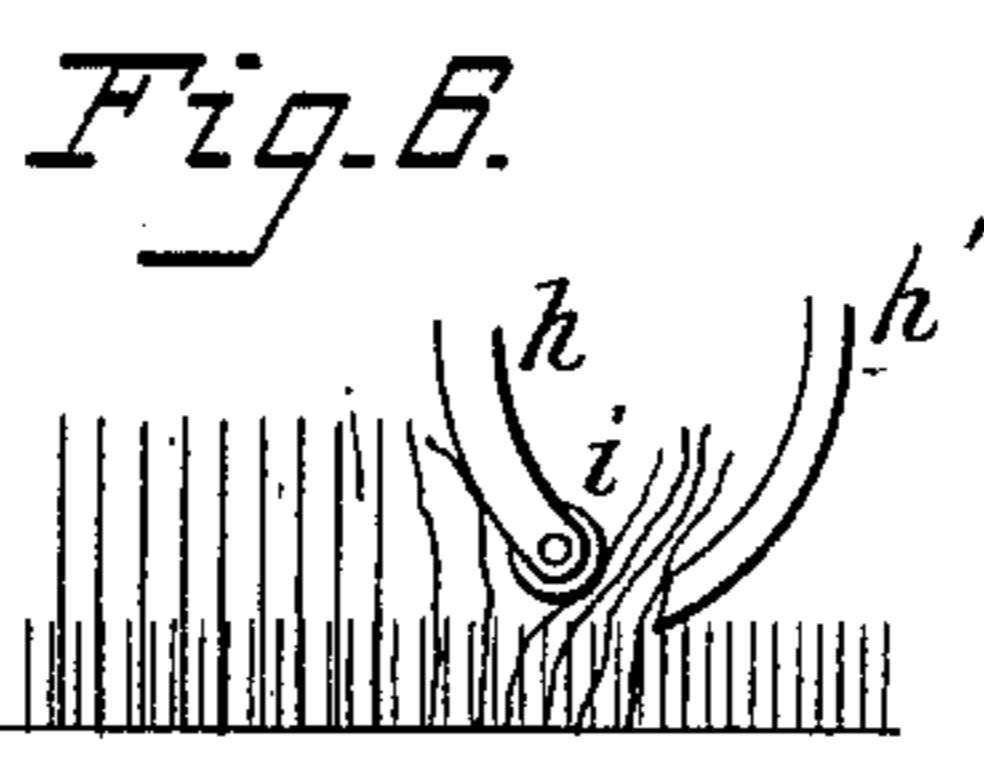
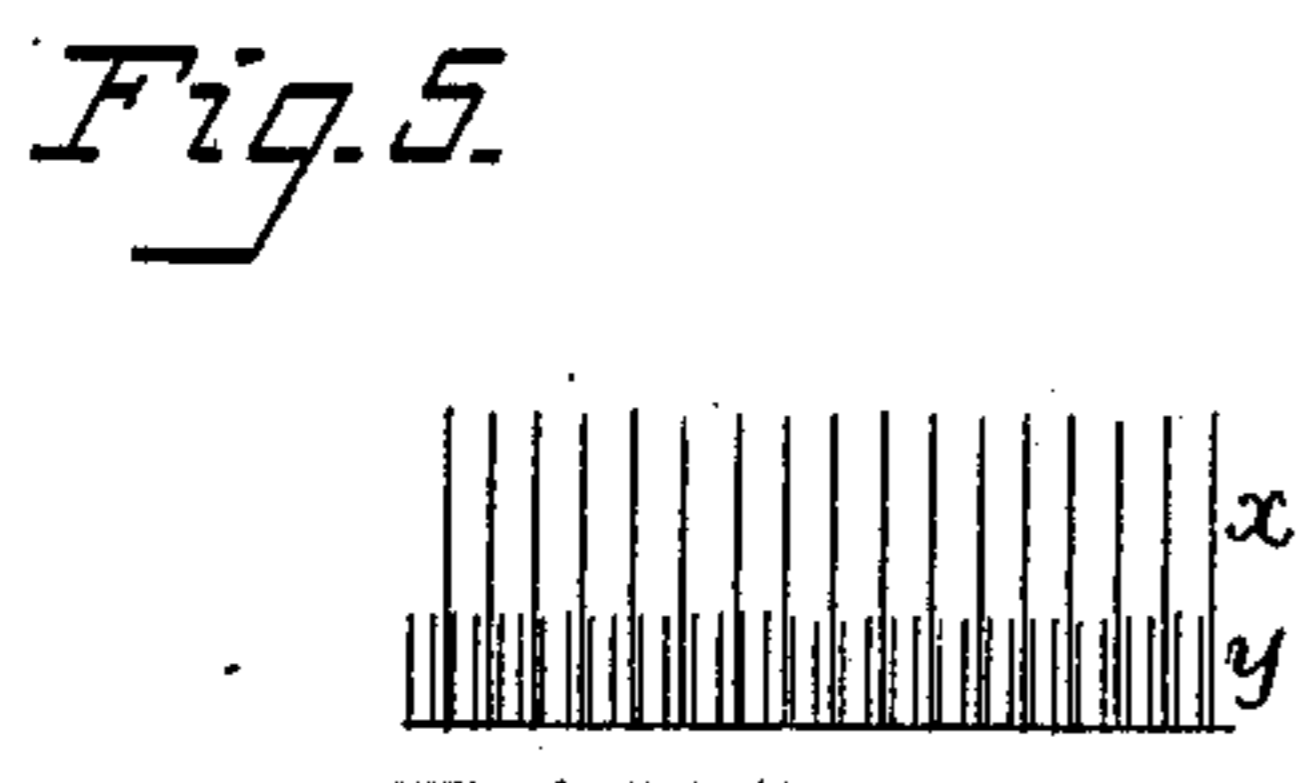
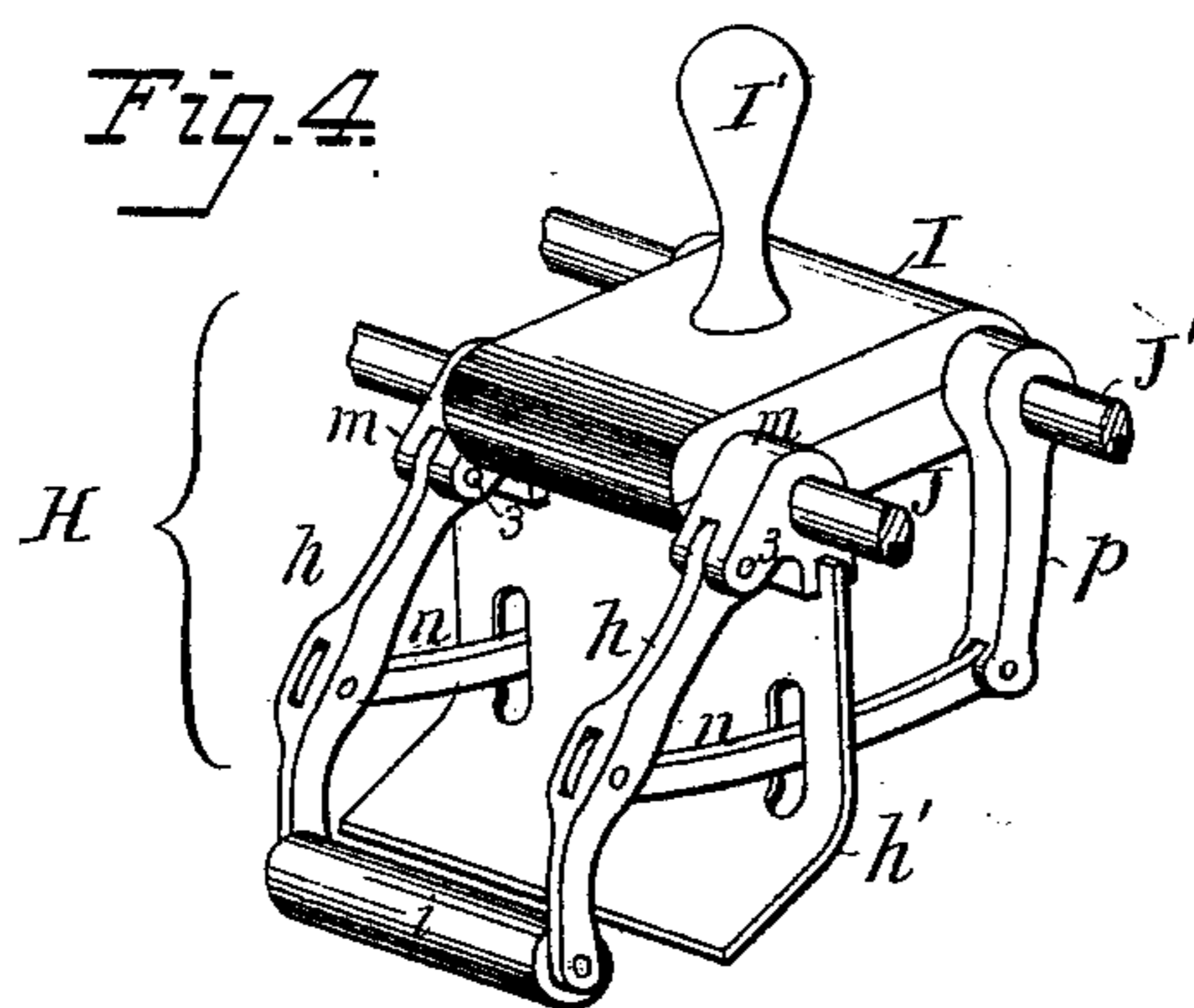
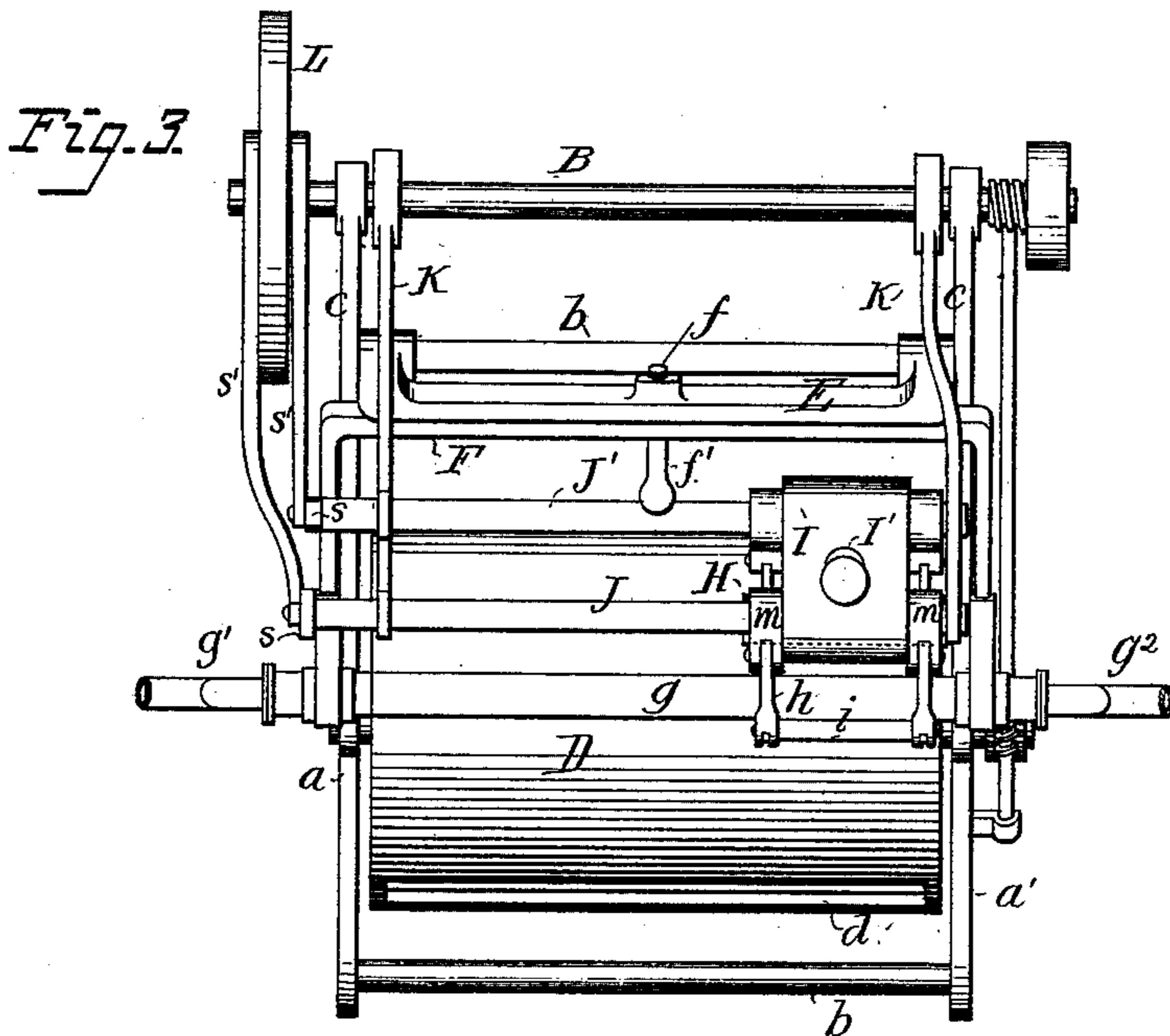
(No Model.)

2 Sheets--Sheet 2.

H. A. HOUSE & S. D. CASTLE. Treating Pelts.

No. 233,415.

Patented Oct. 19, 1880.



Attest:
Courtney & Cooper,
William Paxton,

Henry A. House,
Saml. D. Castle,
By their attorney,
Charles E. Foster.

UNITED STATES PATENT OFFICE.

HENRY A. HOUSE AND SAMUEL D. CASTLE, OF BRIDGEPORT, CONN.

TREATING PELTS.

SPECIFICATION forming part of Letters Patent No. 233,415, dated October 19, 1880.

Application filed September 14, 1880. (No model.)

To all whom it may concern:

Be it known that we, HENRY A. HOUSE and SAM. D. CASTLE, of Bridgeport, Fairfield county, Connecticut, have invented an Improvement in Treating Pelts, of which the following is a specification.

The object of our invention is to extract the master-hairs from pelts without the tedious and expensive manipulation heretofore requisite for this purpose; and this object we effect by the means hereinafter set forth, and illustrated in the accompanying drawings, in which—

Figure 1 is a transverse sectional elevation of a machine embodying our invention; Fig. 2, a front elevation; Fig. 3, a plan view; Fig. 4, a detached perspective view of the carrier and picker, and Figs. 5, 6, and 7 views illustrating the operations upon the pelts.

A represents the frame, of any suitable form, to support the mechanism, which may be variously constructed without departing from the essential features of our invention. As shown, the frame consists of two side pieces, *a a'*, and cross-bars *b*, the side pieces having upwardly-projecting standards *c*, in which turns the driving-shaft B.

On a lower shaft, C, turns a cylindrical carrier or table, D, which is rotated by means of a worm-gear driven from the shaft B, and in the periphery of the carrier is a slot, *d*, containing a clamping-bar, *e*, by means of which the edges of a pelt, X, may be secured, with the fur downward, to the carrier, as shown in Fig. 1.

At the rear of the carrier, to one of the cross-bars *b*, is hung a frame, E, to which, by a central screw-bolt, *f*, is pivoted, so as to swing freely, a yoke-frame, F, carrying a hollow bar or tube, *g*, through which a current of steam or hot air may be passed by means of flexible pipes *g' g'*. A handle, *f'*, connected to the bolt *f*, serves as a means of tightening and loosening the latter to facilitate the adjustment of the frame F, as may be necessary, according to the shape of the pelt operated upon.

Above the bar *g* is arranged a mechanical picker, of any suitable construction, which is connected with such adjusting and operating devices as will insure the gripping by the picker of the long master-hairs *x*, that project beyond

the finer body of fur *y*, Fig. 5, and the extracting of such hairs by pulling the same out by their roots.

In the drawings, we have illustrated the picker H, consisting of two jaws, *h h'*, hung to a carriage, I, sliding freely upon rock-shafts J J', carried by a frame, K, swinging upon the shaft B. The jaw *h'* consists of a bent blade secured to a bracket, *m*, sliding on but rock- ing with the shaft J; and the jaw *h* consists of arms pivoted at 3 to the brackets *m*, and carrying a cross-bar, *i*, having a rubber or elastic covering.

The jaw *h* is connected, by rods *n*, to arms *p* of the rock-shaft J', the arms *p* sliding on the shaft with the carrier I, but rocking with the shaft. The shafts J J' terminate in cranks *s s*, connected to rods *s' s'*, slotted and sliding upon the shaft B by the action of a wheel, L, having cam-grooves on its opposite faces receiving studs on the said rods.

The frame K may be adjusted to bring the picker to and from the pelt by means of a screw-shaft, M, turning in a stud, *q*, of the side frame, *a*, and in an oscillating nut, *r*, carried by an arm, *s'*, extending from the said frame K.

The pelt, after being clamped to the carrier D, is passed round the tube *g*, so as to present the hair face upward to the picker H, the jaws of which are so vibrated that the bar *i* will first bend the master-hairs, as shown in Fig. 6, toward the jaw *h'*. The latter will then be brought with its edge firmly against the bar *i*, Fig. 7, and both will then be rocked in the direction of the arrow, Fig. 7, thereby pulling the hairs thus gripped between the jaws by their roots from the skin. As these operations are rapidly repeated the carrier D is revolved so as to bring different portions of the pelt successively under the action of the picker, which thus withdraws the master-hairs from the length of the pelt for a distance proportioned to the width of the picker. The carriage I may then be adjusted by means of a handle, I', upon the shafts J J', so as to bring the picker above another portion of the pelt, the carrier D being turned back, so as to start the operation from the same edge of the pelt, as before. By successive adjustments of the carrier D and carriage I every portion of the pelt is speedily acted upon, and

by elevating or depressing the frame K the picker is adjusted to seize the master-hairs close to the fur without griping the latter, and by tilting the frame F the picker is maintained at the same relative distance from the fur as it approaches the thinner edges of the pelt.

We have ascertained that by heating the pelt by passing it over a heated bar or otherwise, the roots of the master-hairs are so affected that they will pass easily from the skin without any tearing action likely to result in the extraction of the fur.

We do not confine ourselves to the within-described form of picker or mode of operating the same. Any suitable character of jaws may be employed, and the picker may be reciprocated vertically so as to seize and withdraw the master-hairs. The pelt-carrier may also consist of a flat reciprocating table, heated, if necessary, and traveling laterally as well as back and forward.

We propose, to facilitate manipulating the pelt, to provide the machine with one or more treadles arranged so that the operations of the machine may be arrested or started and the frame F rocked by the action of the foot. Without confining ourselves, therefore, to the precise construction and arrangement shown,

We claim—

1. The combination of a carrier adapted to hold and carry a pelt, and a picker provided with jaws and operating mechanism, whereby the jaws are caused to gripe and withdraw the master-hairs, substantially as set forth.
2. The combination of a picker constructed to operate as set forth, and a heated tube or

case for supporting the pelt, substantially as set forth.

3. The combination of a pelt-carrier, picker, and bar *g*, adjustable below the picker, substantially as set forth.

4. The combination of the carrier, picker, swinging frame E, yoke-frame F, hollow bar *g*, and device for adjusting the frame F, substantially as set forth.

5. The combination of the rock-bars J J', brackets *m*, blade *h'*, bar *i*, connected to arms pivoted to the brackets *m*, and rods *n*, connected to arms *p* of the shaft J', substantially as specified.

6. The combination of the picker with a carriage, I, supporting the same movably upon the jaw-operating shafts, substantially as set forth.

7. The combination, with the carrier and picker, of appliances for setting the same at different degrees apart, substantially as set forth.

8. The mode described of removing master-hairs from pelts, the same consisting in first heating the pelt adjacent to the roots of the master-hairs and then applying force to withdraw the latter, as specified.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

HENRY A. HOUSE.
SAMUEL D. CASTLE.

Witnesses:

WILLIAM HAMILTON,
ALFRED B. BEERS.