

(No Model.)

P. ASHBERRY & W. BARNES.
DRIVING MECHANISM.

No. 519,313.

Patented May 8, 1894.

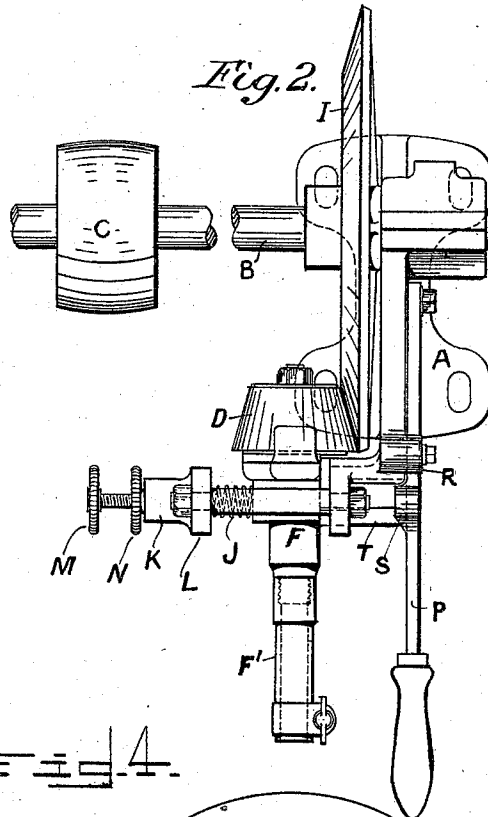
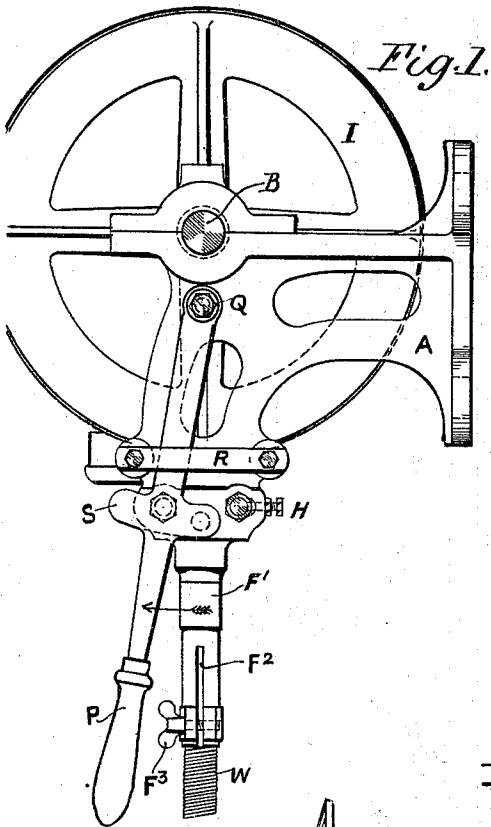


Fig. 3.

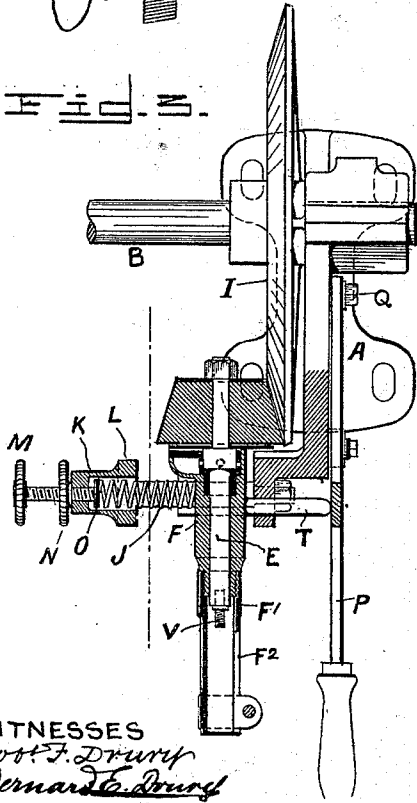
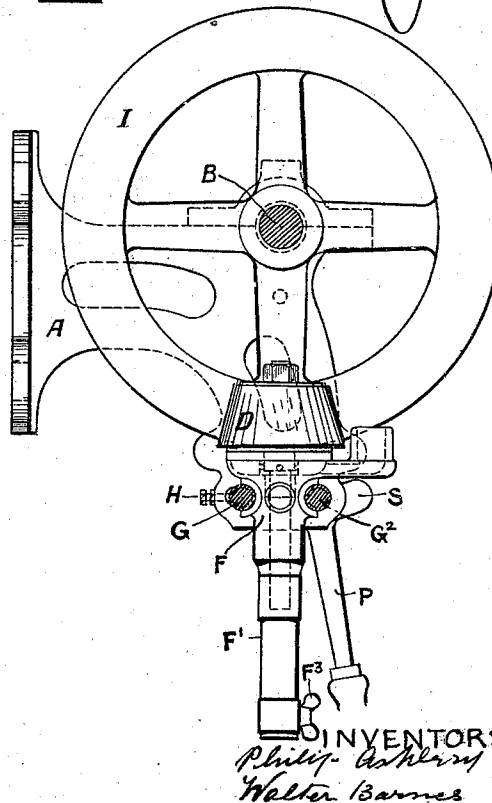


Fig. 4.



WITNESSES
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DRIVING MECHANISM.

SPECIFICATION forming part of Letters Patent No. 519,313, dated May 8, 1894.

Application filed February 10, 1893. Renewed February 17, 1894. Serial No. 500,580. (No model.)

To all whom it may concern:

Be it known that we, PHILIP ASHBERRY, manager, and WALTER BARNES, ivory-worker, subjects of the Queen of Great Britain, and residents of Sheffield, in the county of York, England, have invented certain new and useful Improvements in Driving Mechanism for Imparting Rotary Motion to Sheep-Clippers and the Like; and we do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, which form a part of this specification.

Our invention relates to improvements in the driving gear or driving mechanism used to impart rotary motion, received from a driving belt, to a clipping machine for wool or hair, or other similar hand machine.

The objects aimed at in the construction of this improved driving gear, are first, to enable the construction and the various parts and movements to be readily understood by any man of intelligence upon a sheep farm, or a colonial shearer; and secondly, to facilitate putting the mechanism in gear and out of gear to start and stop the driven machine by a simple hand-lever movement. We attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of the mechanism. Fig. 2 is a front elevation of the same. Fig. 3 is a front elevation partly in section; and Fig. 4 is an elevation showing the other side of the machine as compared with Fig. 1. Similar letters refer to similar parts throughout the several views.

A is a bracket or hanger of a suitable configuration, to carry the various parts herein-after described, and to support one end of the driving shaft B, with the usual pulley C, or other arrangement of driving pulleys.

The friction cone D, (having its bearing surface preferably of leather,) and its spindle E, are carried by a sliding carriage F, which is held between and moves laterally upon, two horizontal projecting rods G and G², one of which can be set up or adjusted by a screw H, to compensate for wear. The friction cone D is held in contact with the face of the friction wheel I, upon shaft B, and is driven by such frictional contact.

To regulate the pressure of the cone D,

upon the face of the wheel I, we use a coiled spring J, held in the sleeve K of the cross-head L, and pressing against the carriage F, and we increase or diminish its pressure by an adjusting screw M, which acts upon the end of the spring J, through an interposed disk O, and is secured in position by a lock-nut N.

Depending chains and cords being objectionable as a means for starting and stopping driving gear for sheep clippers, as they are very liable to get entangled and broken, we adopt the following means: To the bracket A, we attach a lever P, by means of a pin Q, and retain it by means of a guard plate R, and lower down we provide the same with a horizontally placed inclined face or wedge-piece S, which acts against the end of a rod T, projecting from the sliding carriage F, through the lower edge of the bracket. When the lever is pulled toward the shearer in the direction of the arrow, in Fig. 1, the incline S forces back the rod T, and carriage F, compresses the spring J, and withdraws the cone D out of contact with the wheel I. The reverse movement of the lever withdraws the incline, and allows the spring J to force back the carriage, and bring the cone D again in contact with the face of the wheel I, causing the cone to revolve. The lower end of the cone-spindle E is provided with a double-ended screw V, to engage with the end of a flexible shaft, which may be of any known or improved construction. The depending socket F', which incloses the screw V, and forms part of the carriage F, and in which the spindle end revolves, is divided by a slit or longitudinal sawgate F², having on each side a lug or ear through which a screw F³ is passed, so that the internal diameter of the socket may thereby be reduced at will. By this arrangement the cover of the flexible shaft is gripped and supported, or released when required. The length or longitudinal position of the cover on the shaft can also be regulated by adjusting it within said socket.

Having thus fully described our said driving mechanism, what we claim as our invention, and desire to secure by Letters Patent, is—

1. A frictional driving mechanism, for clippers and the like, consisting of a bracket A, friction wheel I, adjustable sliding carriage

F, friction cone D and its spindle E, pressure spring J and adjusting screw M, hand lever P with inclined face S, rod T attached to carriage F, and shaft-supporting socket F' attached to the cover of the cone-spindle, substantially as hereinbefore described and as shown.

2. In a frictional driving mechanism, the combination with the friction cone and its spindle of a sliding carriage carrying the same and provided with a projecting rod, an adjustable spring forcing said carriage in one direction, and a lever with an inclined face

acting against said rod to force the carriage in the opposite direction, substantially as hereinbefore described.

In testimony that we claim the foregoing as our own we have affixed hereto our signatures, in presence of two witnesses, this 24th day of January, 1893.

PHILIP ASHBERRY.
WALTER BARNES.

Witnesses.

ROBT. F. DRURY,
BERNARD E. DRURY.