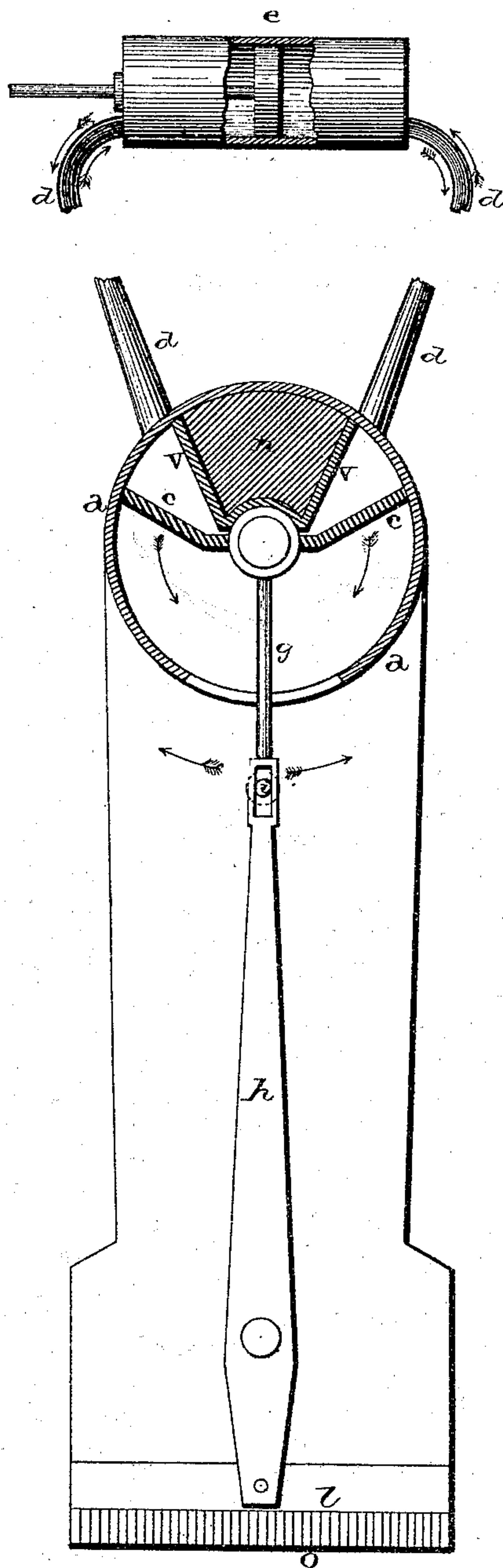


S. REYNOLDS & M. J. EARL.
Horse-Clipping Machines.

No. 153,846

Patented Aug. 4, 1874.



WITNESSES.
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UNITED STATES PATENT OFFICE.

SAMUEL REYNOLDS, OF PIERREPONT MANOR, AND MELVIN J. EARL, OF
MANNSVILLE; SAID EARL ASSIGNOR TO CHARLES ROBINSON, OF NEW
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IMPROVEMENT IN HORSE-CLIPPING MACHINES.

Specification forming part of Letters Patent No. **153,846**, dated August 4, 1874: application filed
February 9, 1874.

To all whom it may concern:

Be it known that we, SAMUEL REYNOLDS, of Pierrepont Manor, and MELVIN J. EARL, of Mannsville, in the county of Jefferson and State of New York, have invented certain new and useful Improvements in Machines for Clipping Animals; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings which form part of this specification.

The nature of our invention relates to an improvement in machines for clipping animals; and it consists in the arrangement and combination of devices, which will be more fully described hereafter, whereby a vibrating lever, to which the cutting device is applied, is operated by means of compressed air.

Figure 1 represents a plan view of our invention, partly in section.

A represents a cylinder, of any desired size, in which the rocking piston *c*, moving air-tight, is journaled. Attached to this cylinder by pipes *d* is a double-acting valveless air-pump, which, at each stroke of its piston, forces a body of compressed air against one wing of the rocking piston *c*, while it sucks or draws upon the other. Secured to the rocking piston is a lever, *g*, which projects outward through an opening in the side of the cylinder, and is connected or attached, by means of the stud *i*, with the slotted end of the vibrating lever *h*, to which a cutting device, *l*, is secured, which works back and forth over the comb *o* in the usual manner. Between

the two pipes *d* in the cylinder is placed either a solid block of rubber or a metal block, *n*, having its sides lined with a rubber packing, *v*, of sufficient thickness to deaden the sound of the wings *c* when they strike against the block, and thus prevent any noise being made which might frighten the horse.

The air-pump may be geared in any suitable manner, so that the piston will vibrate very rapidly, and give a correspondingly rapid motion to the knife.

The pump may be attached to any suitable base, and as the connecting-pipes are rubber the clipping-machine can be moved with the greatest freedom all over and around the animal.

We are aware that sheep-shearing machines in which a reciprocating piston is used have been driven by air, and these we disclaim.

Having thus described our invention, we claim—

In a machine for clipping horses, the combination of the slotted cylinder *a*, rocking piston *c*, block *n*, lever *g*, and cutting devices *h* *l*, the parts being arranged and combined to operate substantially as shown and described.

In testimony that we claim the foregoing we have hereunto set our hands this 4th day February, 1874.

SAMUEL REYNOLDS.
MELVIN J. EARL.

Witnesses:

HIRAM ALLEN,
BENJ. P. LARNED.