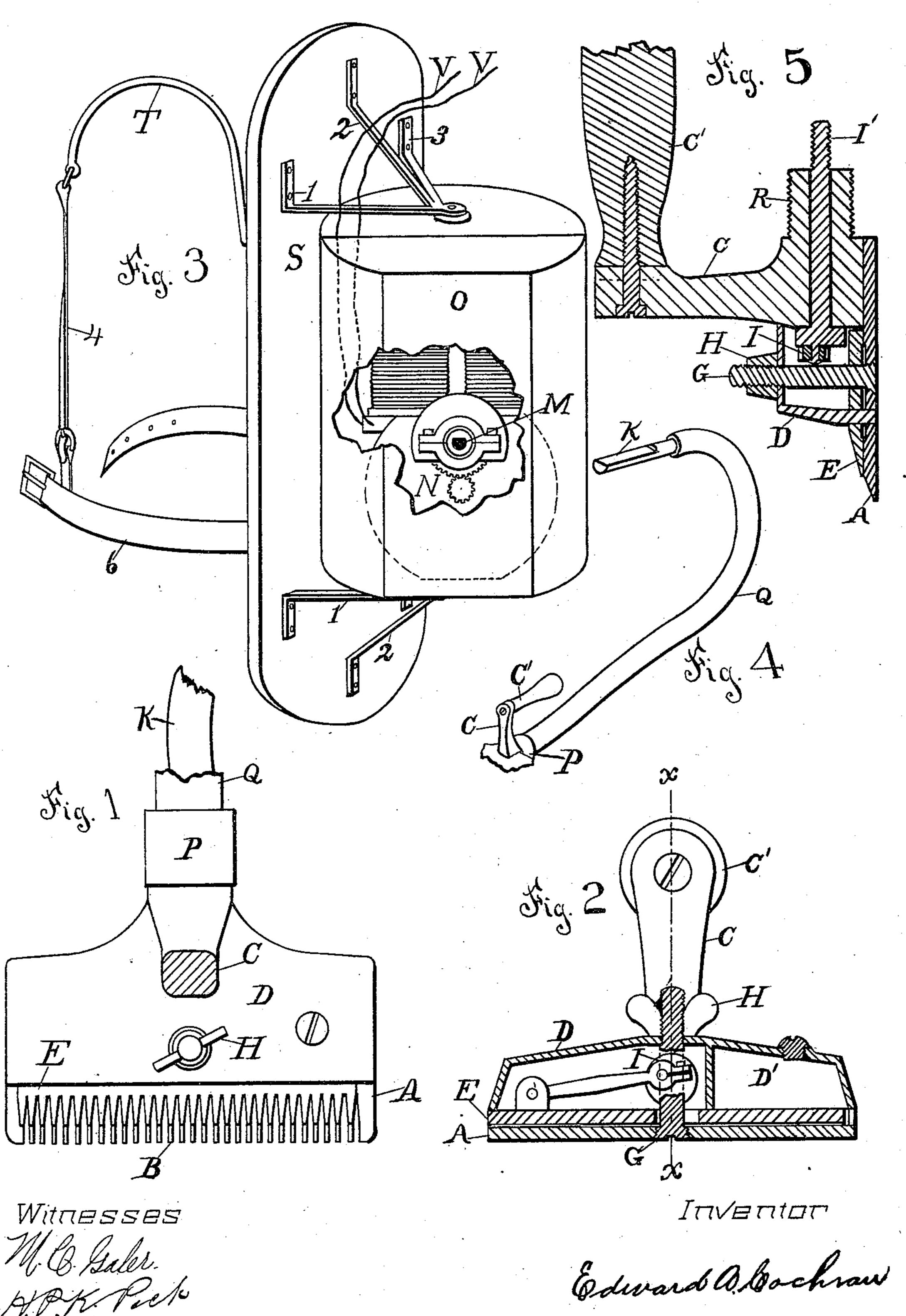
(No Model.)

## E. A. COCHRAN. HORSE CLIPPING MACHINE.

No. 426,920.

Patented Apr. 29, 1890.



## United States Patent Office.

EDWARD A. COCHRAN, OF PASADENA, CALIFORNIA, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, OF ONE-HALF TO CHARLES A. SAWTELLE AND ELIZA J. BEACH, BOTH OF SAME PLACE.

## HORSE-CLIPPING MACHINE.

SPECIFICATION forming part of Letters Patent No. 426,920, dated April 29, 1890.

Application filed March 5, 1889. Serial No. 302,749. (No model.)

To all whom it may concern:

Be it known that I, EDWARD A. COCHRAN, a citizen of the United States, residing at Pasadena, in the county of Los Angeles and State of California, have invented a new and useful Improvement in Horse-Clipping Machines, of which the following is a specification.

The object of my invention is to provide means whereby the clipping of horses can be accomplished with greater ease, facility, and rapidity than has heretofore been possible.

My invention consists of a clipper constructed as hereinafter more fully set forth, and the combination of the parts comprising the same with a suitable motor and intermediate connections for actuating the movable parts thereof, so that the operator will have full freedom of movement both of hands and body while clipping the horse.

It also consists of specific features herein-

after set forth and claimed.

Clippers operated by motors mounted upon portable stands have heretofore been connected with such motors by means of flexible driving-shafts, through which the motive power is communicated to the cutter-blade. Long shafts of this character are not practicable of economical construction and operation. Therefore short shafts are used, and the operator finds it necessary to stop the clipping of the horse from time to time to change the location of the motor-stand as he moves about the horse. Clippers heretofore operated by flexible shafts have also proven objectionable, in that the shaft interfered with the free movement of the clipper.

The object of my invention is to avoid the difficulties above enumerated. I do this by providing the clipper-head with a handle above the plane of its connection with the flexible driving-shaft, so that the handle does not interfere with such connection, and the connection may be brought close to the cutting-edges of the clipper, and also by connecting the flexible shaft with a portable electric motor strapped to the person of the operator and connecting such motor with electric wires having sufficient current passing

through them to operate the motor and drive 50 the clipper-blade. By this means the operator is relieved of all impediments to the movements of his hands and body except that offered by the flexible electric wires.

The accompanying drawings illustrate my 55

invention.

Figure 1 is a top view of the clipper-head, showing the flexible driving-shaft connected therewith in close proximity to the cutterblade. The handle of the clipper is broken 60 away to expose the point of connection between the clipper and the shaft. Fig. 2 is a vertical longitudinal section of the clipperhead, exhibiting also a front view of the handleshank and laterally-arranged handle. Fig. 65 3 represents the electric motor and its case and attachments, whereby it may be secured to the person of the operator. Fig. 4 represents the flexible shaft and its casing attached to the clipper-head, only a portion of which 70 is shown. Fig. 5 is a vertical mid-section of the clipper-head, taken transversely of the blade. The shank and a portion of the handle is also shown in section.

The base or comb-plate A of the clipper- 75 head is secured to a vertical shank C, provided with the short perforated laterally-projecting nipple R, upon which the collar P on the end of the casing-tube Q of the flexible shaft K screws. The crank-shaft I', which serves to 80 operate the pitman I, which drives the top clipper-blade E, extends through and is journaled in the perforation of the shank C and is axial with the nipple R. The projecting portion of shaft I' is threaded for attachment 8; with the flexible shaft. A laterally-projecting handle C' is fixed upon the upper end of the shank C. By this contrivance the connection of the flexible shaft with the operating mechanism is brought close to the clipper-blade, 90 and the clipper can be manipulated with great freedom of motion.

The electric motor N is mounted within a portable axially-pivoted box O, supported by brackets 1 2 3, secured to plates S, provided 95 with shoulder-hooks T and belts 6 and 4, by which the plate may be secured to the back

of the operator.

V V are the electric wires through which the electric energy is conducted to the motor.

In practice one end of the flexible shaft is inserted into the coupling-socket M and the electric current is allowed to pass through the motor, thus operating it to drive the cutter-blade, the plates S having been previously fastened to the back of the operator, who grasps the handle C' and is ready for work.

To The wires V V are preferably led to the motor from above, so that within a certain radius the movements of the operator are wholly unimpeded.

The clipper may be changed from one hand to the other, as desired, the pivoted box O accommodating the shaft to the changes thus

made.

In order to cover the working parts—the pitman, the cutter-blade, and the crank—and protect the same from dust and hair, I provide the cover D and secure the same to the comb-plate by means of the thumb-nut H, screwed upon the stud G, fixed to the base or comb-plate A and extending upward through a slot in the cutter plate or blade E.

Now, having described my invention, what I claim as new, and desire to secure by Let-

ters Patent, is—

1. In a horse-clipping machine, the combi-30 nation of a portable electric motor provided

with attachments for securing it to the back of the operator, the clipper-head having the shank C and provided with the short laterally-projecting perforated nipple R, the handle C', secured at the upper end of said shank 35 above the plane of said nipple, the comb-plate rigidly secured to the clipper-head, the cutter-plate pivotally mounted on the comb-plate, mechanism for operating said cutter-plate, and a flexible driving-shaft connected 40 to said mechanism below the plane of the handle and to the portable motor, substantially as and for the purpose set forth.

2. In a horse-clipping machine, the combination set forth of the comb-plate A, se-45 cured to the shank C, provided with the perforated lateral nipple R and with the handle C' above the plane of such nipple, the cutterplate E, pitman I, crank-shaft I', journaled in said nipple, the flexible driving-shaft, and 50

the motor.

3. In a horse-clipping machine provided with a flexible driving-shaft, as set forth, a clipper-head provided with a handle arranged above the plane of attachment between the 55 clipper-head and the flexible driving-shaft.

EDWARD A. COCHRAN.

Witnesses:

H. P. K. PECK, A. C. HOLMES.