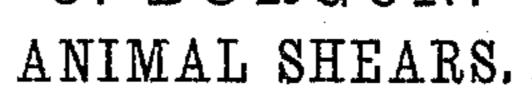
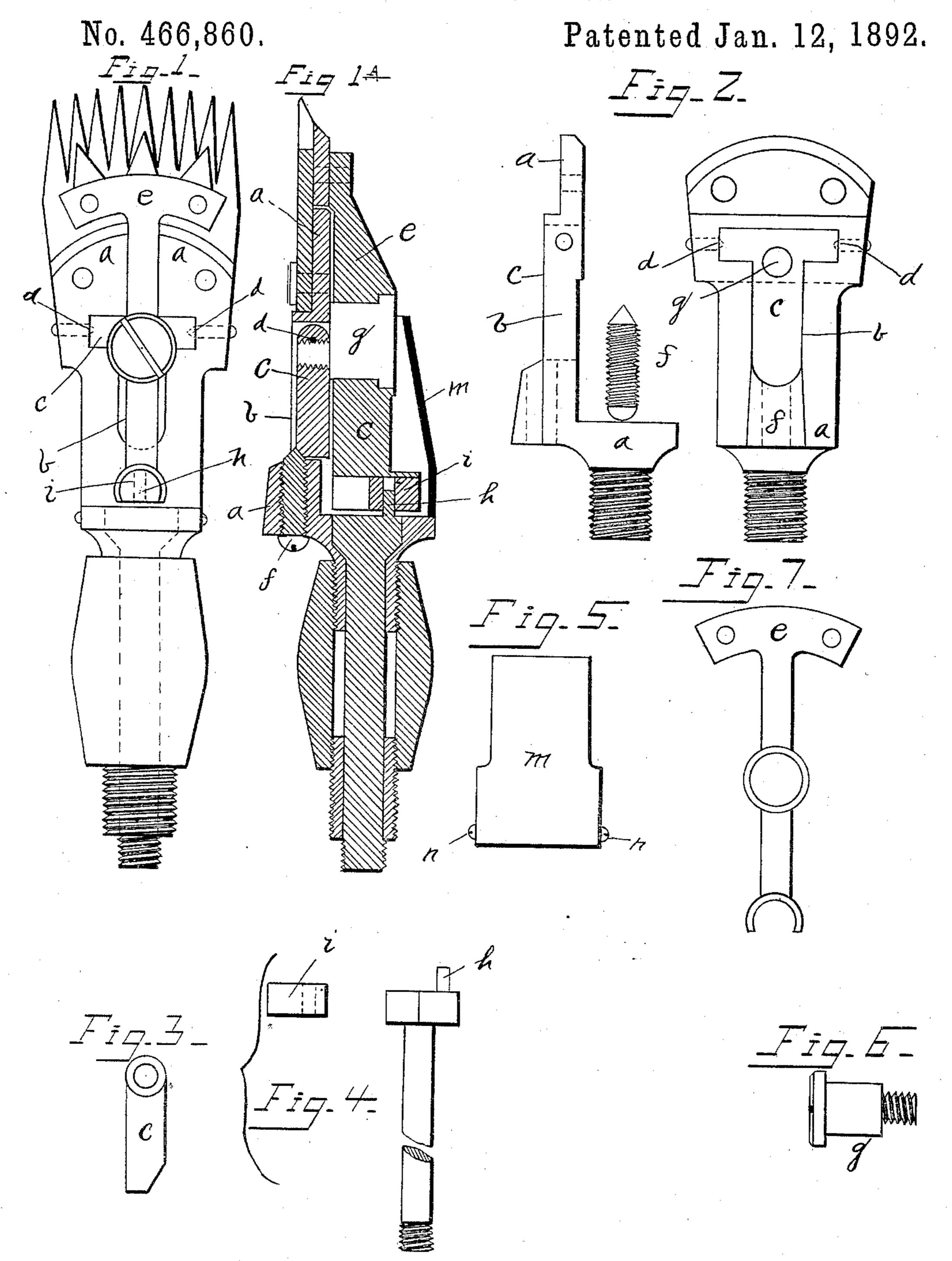
## C. BURGON.





Witnesses Lauis S. Thornasan. M. C. Ball.

Charles Burgon
By his attorneys
Richards V60.

## United States Patent Office.

CHARLES BURGON, OF MALIN BRIDGE, NEAR SHEFFIELD, ENGLAND.

## ANIMAL-SHEARS.

SPECIFICATION forming part of Letters Patent No. 466,860, dated January 12, 1892.

Application filed October 13, 1890. Serial No. 368,041. (No model.)

To all whom it may concern:

Be it known that I, CHARLES BURGON, sheep-shears manufacturer, a subject of the Queen of Great Britain, residing at Malin Bridge, near Sheffield, England, have invented certain new and useful Improvements in Machines for Shearing or Clipping Sheep or other Animals, of which the following is a specification.

making more efficient the working parts of machines for shearing or clipping sheep or other animals, my present improvements principally consisting in applying the required pressure to the top and bottom cutters of such machines.

I attain the object of my invention by the mechanism illustrated in the accompanying

drawings, in which—

Figure 1 is a plan or top view of my improved machine complete, excepting that its case or covering is removed. Fig. 1° is a longitudinal central sectional view of the same. Fig. 2 comprises and shows a side view and a back view of the frame of the machine and the recess or slot with the base-plate fitted in. Fig. 3 is an end view of the base-plate. Fig. 4 comprises and shows a side view of the crankpin and the slide-block. Fig. 5 is a plan or top view of the case or covering of the machine. Fig. 6 is a side view of the screw-pin, and Fig. 7 is a plan or top view of the rocker-bar of my improved machine.

Similar letters refer to similar parts through-35 out the several figures on the drawings.

In carrying out my invention in practice I recess the frame a of my sheep-shearing machine to the necessary depth and shape, as shown at b, Fig 2, on the accompanying draw-40 ings. The recess I make, preferably, of a T shape, or it can be made of a D shape or of other convenient shape. In the recess I fix a metal base-plate c, correspondingly shaped and so made as to work like a hinge or to 45 work on the centers d d. It is supported on or at the sides of the base-plate by the frame a and either by the centers d or by pivots carried in the frame side. Having thus fitted the base-plate, I place a rocker-bar e on it, 50 which bar has a tipping or rocking and oscillating motion imparted to it, as hereinafter described. The tipping or rocking motion I

obtain by providing and fixing a screw f or a cam or wedge or lever or other equivalent device, so as to raise or lower the base-plate 55 at the opposite end, where it is hinged. To obtain the necessary oscillating motion I pass a screw-pin g through the rocker-bar e at or near its center, one end of the pin being made with a screw-thread on it. I then screw the 60 pin into the oscillating base-plate c and so form a perfect joint for the rocker-bar between the head of the pin and the oscillating base-plate. At the end of the rocker-bar e farthest from the cutters of the machine I 65 fix a suitable crank-pin h, with a slide-block i, (or a ball arrangement may be used, if desired,) which, when in action, will give the required oscillating motion to the front end of the rocker-bar e, to which bar the top cutter is 70 attached by means of screws or a pin or pins.

At the rear end of the spindle or driving-shaft of my shearing or clipping machine three or more (or less) universal joints j with ball-couplings are attached, and they are externally protected and covered by a coiled wire k, combined with two (or more) nuts l for attaching to or detaching from the cutting mechanism and the flexible driving-core of the machine. They are incased with leather 80 or other suitable covering.

By means of this appliance the operator is enabled to use the shearing or clipping machine in any desired position or direction.

A conveniently-sized metal case or cover m 85 is provided for protecting the working parts of the machine, which case or cover is attached to or secured on the apparatus by screws n or by a spring-latch or by other equivalent and suitable attaching device.

Having thus fully described my invention, I wish it to be understood that I do not claim separately either the comb or the cutters or the rocker-bar or the crank-pin or the slide-block used in this shearing or clipping ma- 95 chine; but

What I do claim as my invention, and desire to secure by Letters Patent, is—

1. In a sheep shearing or clipping machine, the combination, with frame a, having T- 100 shaped recess, as described, of the oscillating base-plate c, supported by the frame, centers d d, projecting into said recess and on which said base-plate works, a rocker-bar e, mounted

on the base-plate, and means for imparting both a rocking and oscillating motion there-

to, substantially as set forth.

2. In a sheep shearing or clipping machine, 5 the combination, with the frame a, recessed as described, of the oscillating base-plate c, supported by the frame, centers d d, on which said base-plate works, a rocker-bar e, mounted on the base-plate, and means, such as a screw 10 f, for imparting a rocking motion thereto, a crank-pin h, a slide-block i, a metal case or cover m, adapted to fit over and protect the working parts of the top portion of the machine, and screws n n for securing said case 15 or cover to the apparatus, substantially as set forth.

3. In a sheep shearing or clipping machine, the combination, with recessed frame a, oscillating base-plate c, supported thereby, the

universal joints and connections for the at- 20 tachment of suitable means, and centers d d, on which said plate works, of a rocker-bar, a screw f for imparting a rocking motion thereto, a screw-pin connecting the rock-bar with the base-plate, a crank-pin and slide-bar for 25 imparting an oscillating motion thereto, a metal case or cover m, adapted to fit over and protect the working parts of the top portion of the machine, and screws n n for securing said case or cover to the apparatus, substantially 30 as set forth.

In witness whereof I have hereunto set my hand in the presence of two witnesses.

CHARLES BURGON.

Witnesses:

BBISTOW HUNT, WILLIAM HENRY MORTON.