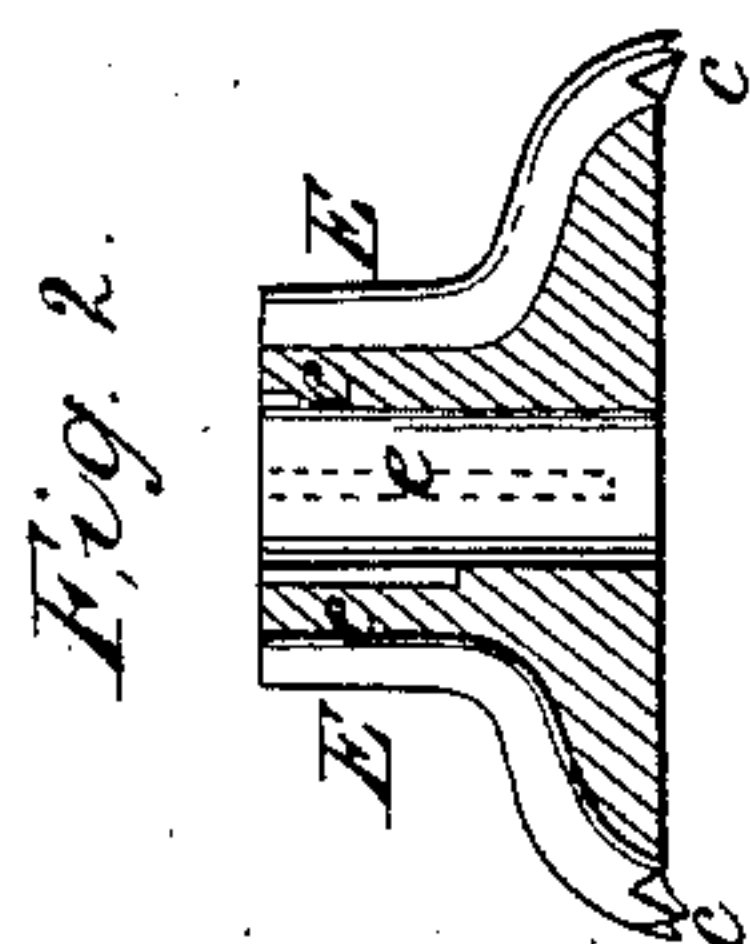
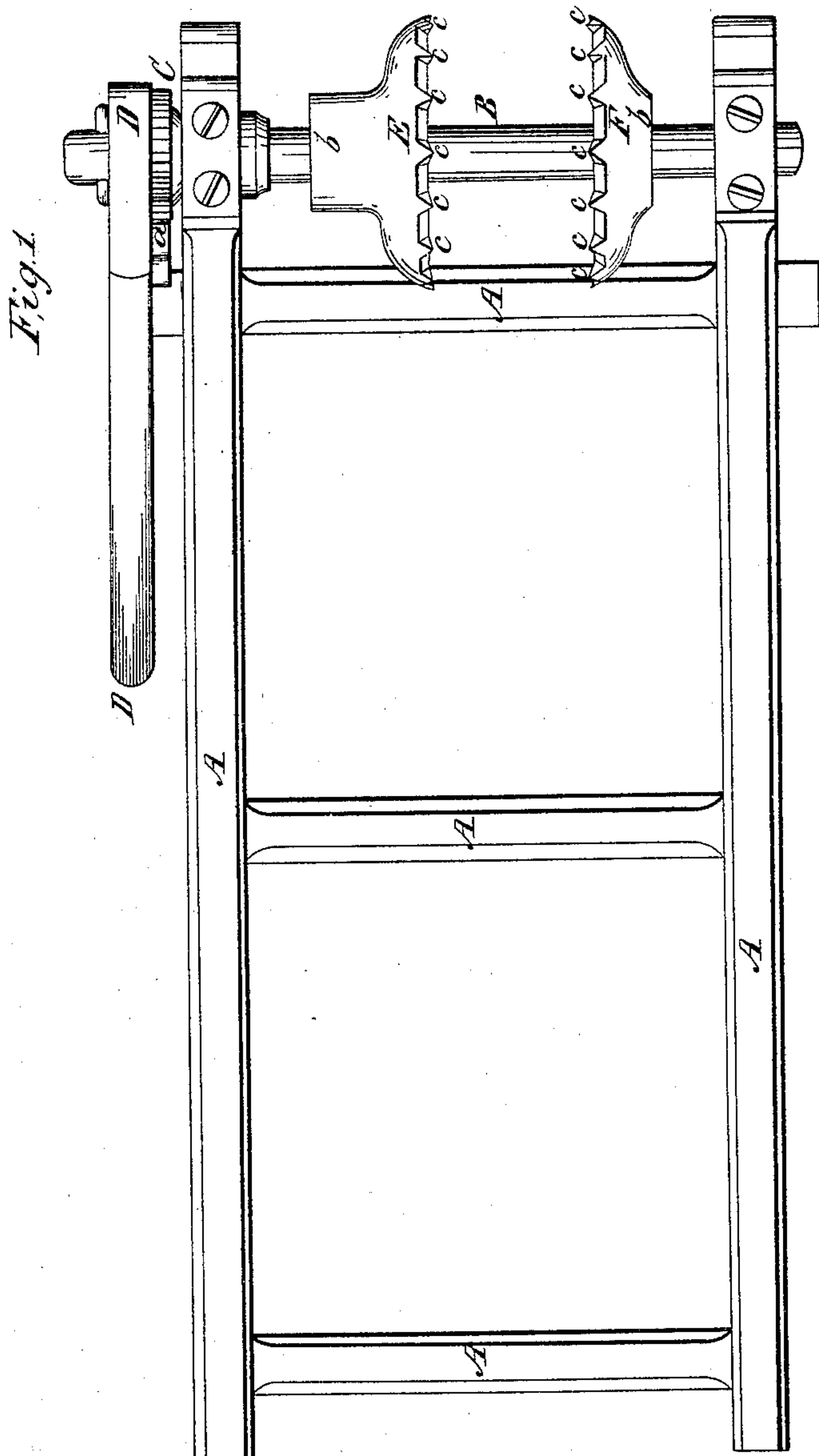


S. Perry,
Drag Saw.

N^o 59,641.

Patented Nov. 13, 1866.



Witnesses

J. D. Patton
Wm. J. Chamberlain

Inventor:

Stuart Perry.
By atty A. B. Stoughton

UNITED STATES PATENT OFFICE.

STUART PERRY, OF NEWPORT, NEW YORK.

IMPROVEMENT IN SAWING-MACHINES.

Specification forming part of Letters Patent No. **59,641**, dated November 13, 1866.

To all whom it may concern:

Be it known that I, STUART PERRY, of Newport, in the county of Herkimer and State of New York, have invented certain new and useful Improvements in an Apparatus for Feeding, Moving, or Rolling Logs; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 represents a top plan of the log-roller, and Fig. 2 represents a section through one of the movable and adjustable heads for seizing the log.

In moving logs along under a saw, a spiked roller, sometimes cylindrical and sometimes concave, has been used; and the ordinary concave roller has been, I believe, divided in its center, and one-half used on each side of the log, but with multiple spikes or spurs for taking into the log to force it along on its support.

I have discovered that whenever more than one belt or circular line of spikes or spurs are used, and particularly upon conical surfaces where they move at varied velocities upon the same shaft, one-half or a very great degree of the power used in moving the log is expended in tearing the spikes or spurs out of the wood; and hence I have devised to use disks or wheels, with spikes or spurs projecting slightly from their faces, but a single series of spikes or spurs only, and thus move a log with great saving of power.

The divided concave roller, so as to make two frusta of cones with their apices toward each other, have (at least one of them) been made adjustable upon their shaft, so as to suit logs of different diameters, by means of set-screws, which require a wrench to turn them, and this wrench is frequently lost, mislaid, or worn out. I have devised a plan for adjusting one or both of my feeding heads or wheels without using a set-screw, wrench, or any other separate or detached instrument whatever.

To enable others skilled in the art to make and use my invention, I will proceed to describe the same with reference to the drawings.

On a suitable frame, A, I arrange a shaft, B, on the projecting end of which there is a ratched wheel, C. A pawl-lever, D, is so arranged as that its attached pawl *a* will take into the ratched wheel, and thus turn the shaft B. The pawl is a pivoted one, and double-toothed, and the lever so hung that both it and the pawl may be worked so as to move the log forward or back as may be required.

Upon the shaft B are placed two wheels or disks, E F, each having suitable hubs *b b* for a substantial bearing on the shaft. On the adjacent or opposing faces of these wheels or heads E F, and at the perimeters thereof, are belts or rings of spikes or spurs *c c*, a single series on each. These spikes or spurs project slightly from the faces of their respective wheels or heads, so as to seize or penetrate the wood of a log placed between them with sufficient depth to move said log when they are turned. One of the heads at least, E, is loose upon the shaft B so far as moving endwise upon the shaft is involved, but must turn with the shaft when feeding the log along; and that it may be made adjustable to logs of varied diameters, I arrange first a stud or pin in the shaft, and then make a series of grooves, *e*, on the inside of the hub of the wheel, of varied lengths, so that by slipping the wheel to a point on the shaft where it can turn upon the shaft, and then selecting a groove of the proper length, slip that groove over the pin, the head or wheel will then have a certain position with regard to its mate or fellow, and turn with it and with the shaft B. If more or less space is required between the heads, a longer or shorter groove may be selected, and thus one or both heads adjusted to any required position on the shaft, and without the aid of any detached or separate instrument, as would be the case where a set-screw or a screw-nut or a key were used. The lengths of the grooves on the inside of the hubs may be marked upon their outsides, as well as their exact positions, so that from these external marks the proper groove and its position may be seen at a glance. Both wheels or heads may be made adjustable, if so preferred, but as a general thing one will be found sufficient.

The grooves may be in the shaft and the stud or pin in the hub, and the same result be attained by the same devices, but only transposed.

Having thus fully described my invention, I would state that I am aware that a patent has been granted to G. Westinghouse for adjusting the head of a log-feeding machine by a set-screw. This I do not claim; but

What I claim as my invention is—

Making one (or both) of the feeding-disks or wheels adjustable upon the shaft by which it is turned by means of a series of grooves of varied lengths and a stud or pin, substantially as and for the purpose described.

STUART PERRY.

Witnesses:

JOHN G. BARRY,
E. P. RODEOCK.