

A. Runstetter & A. Windeck,
Cotton-Scraper and Cutter,
Nº 74.006. Patented Feb. 4. 1868.

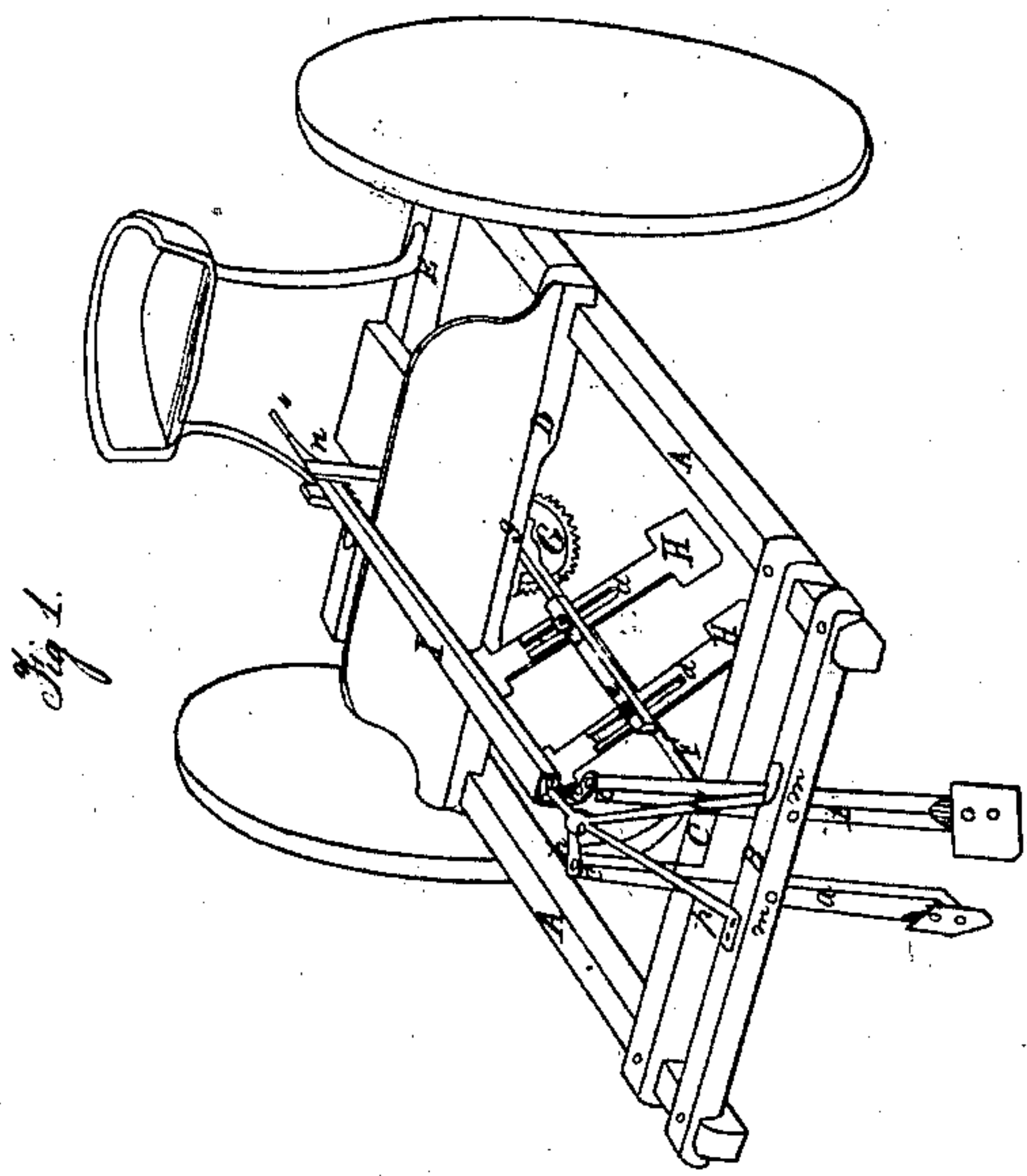


Fig. 1.

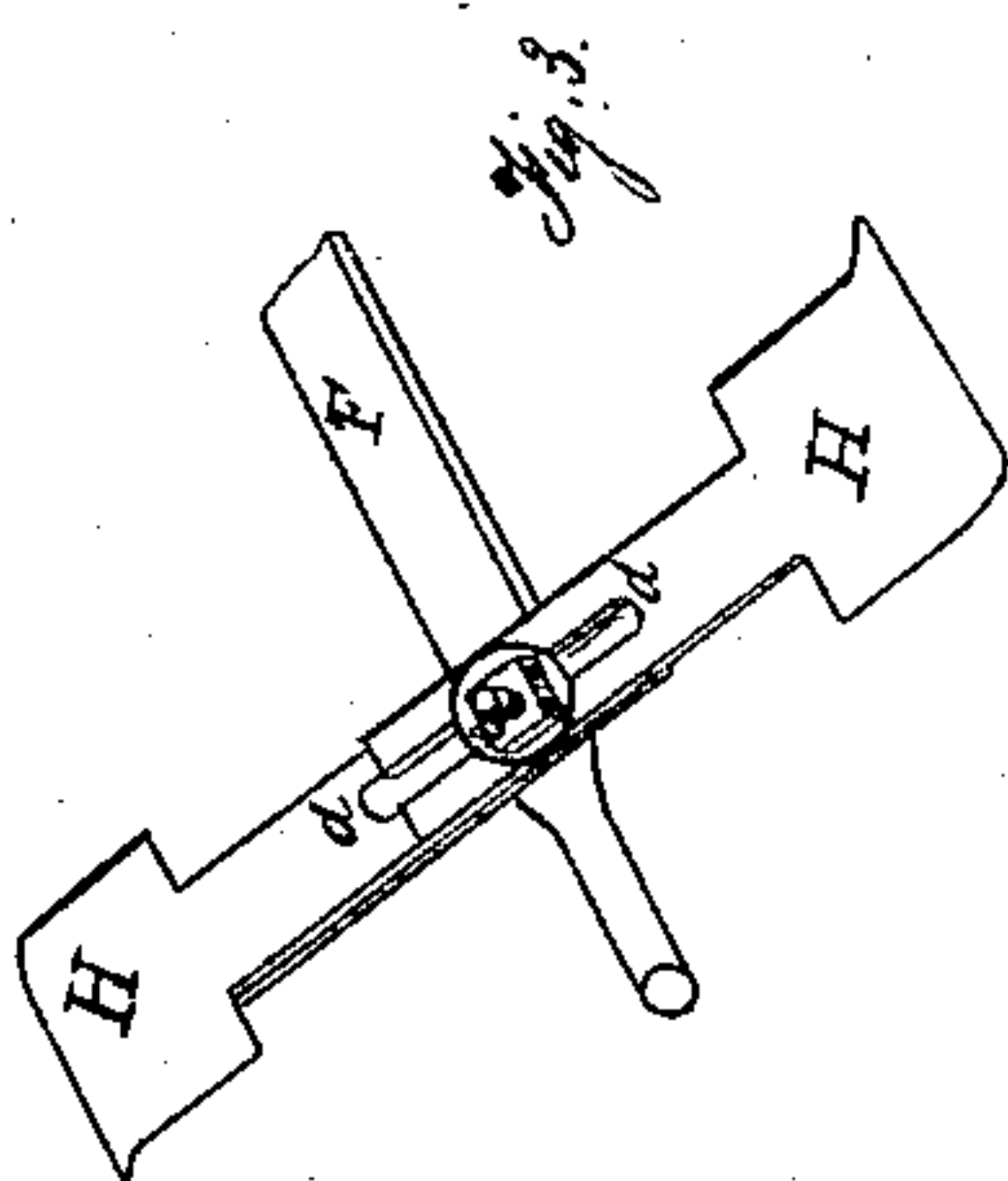


Fig. 3.



Fig. 4.

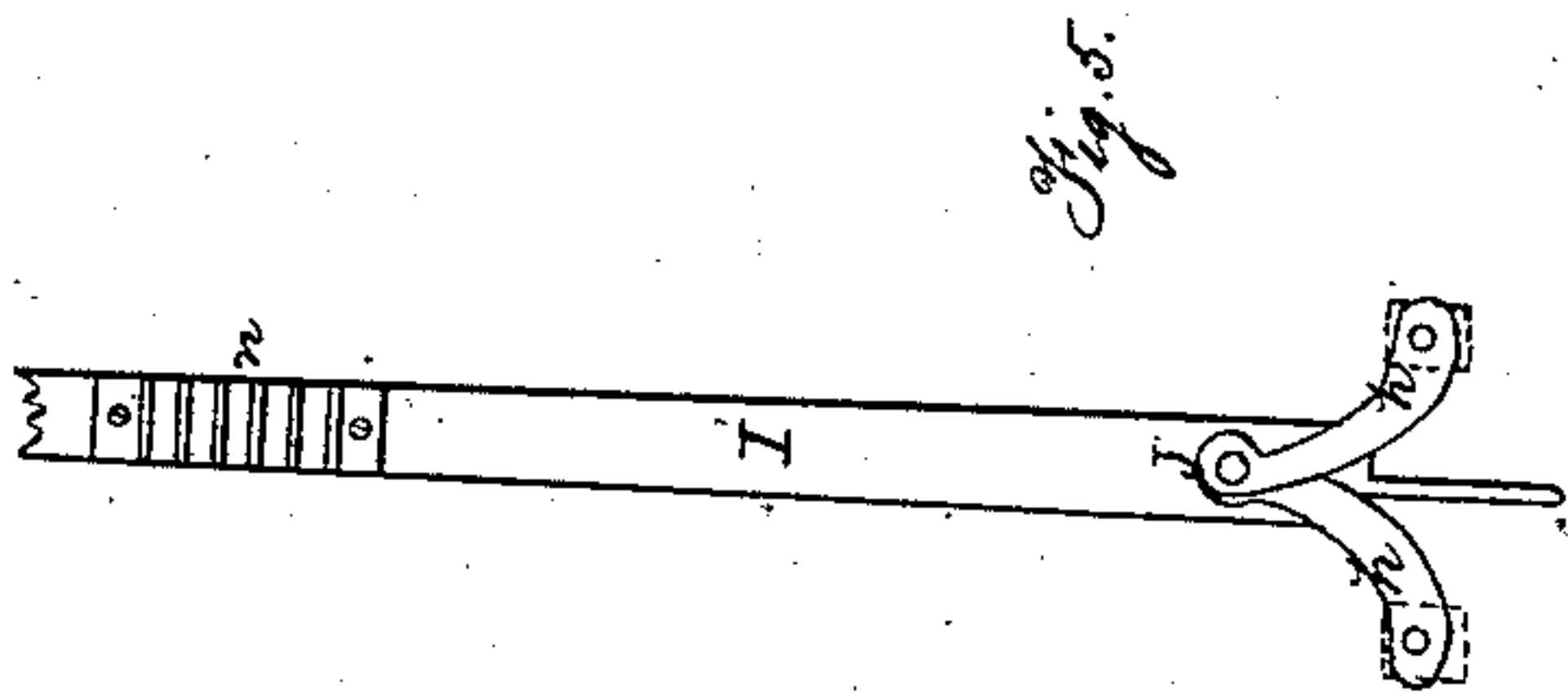


Fig. 5.

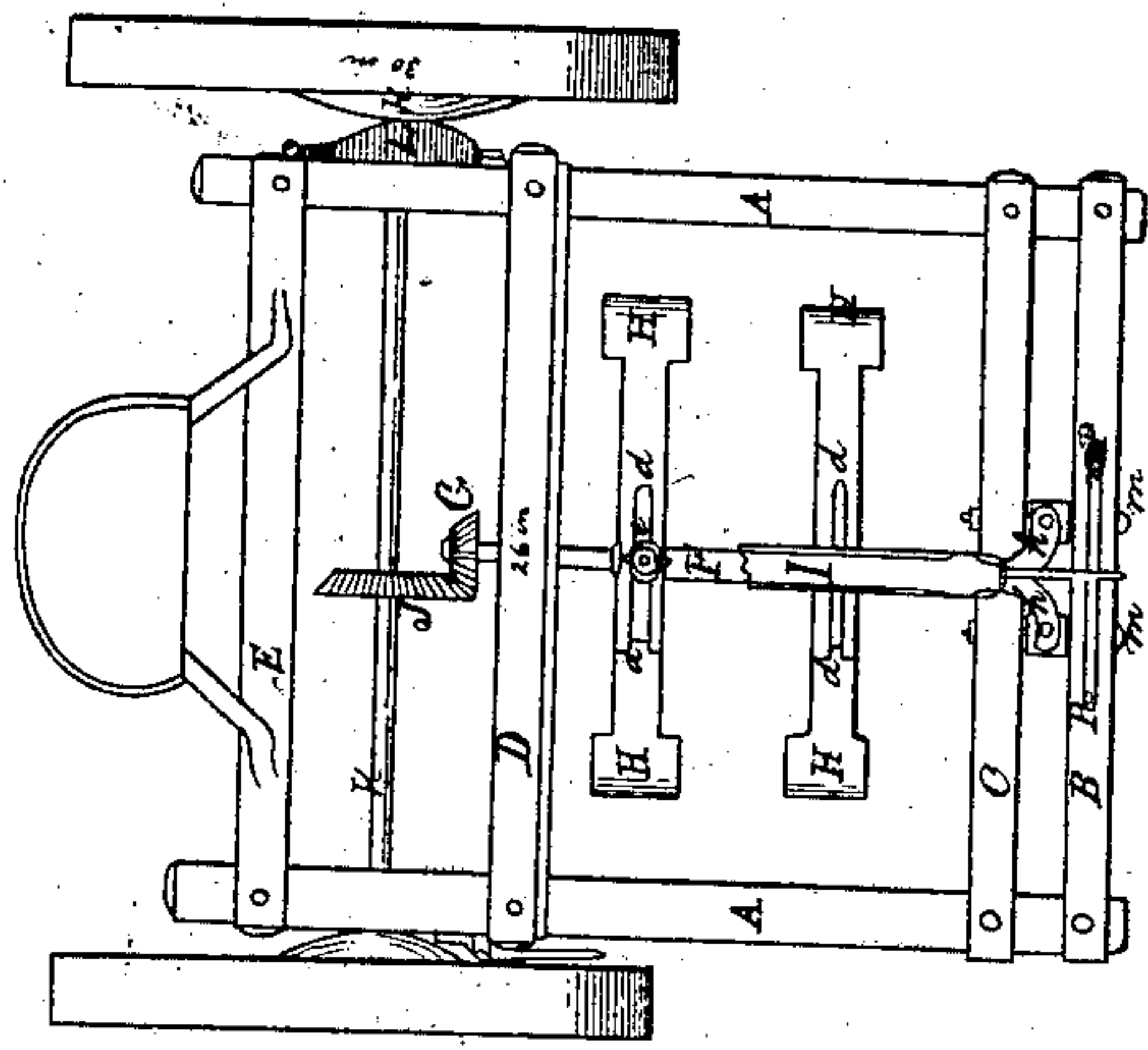


Fig. 2.

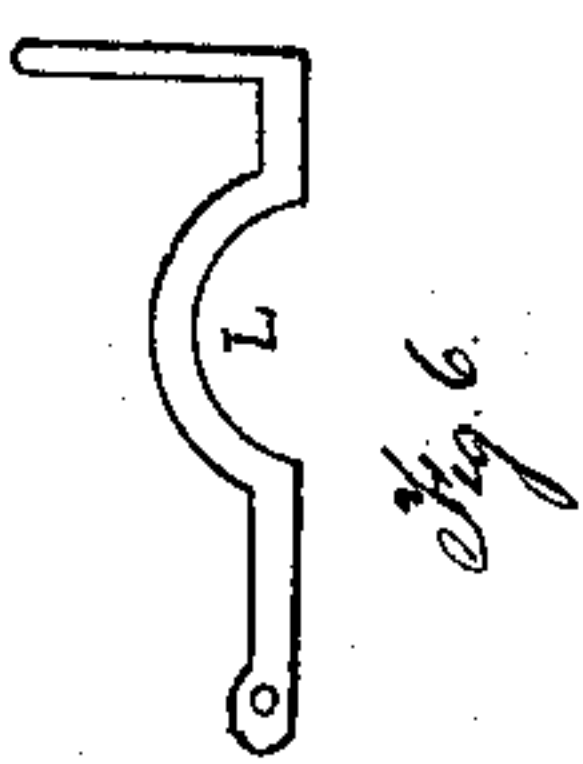


Fig. 6.

Witnesses
Edmund Shurlon
Nicholas Baker

Inventors
Andreas Runstetter
Albert Windeck

United States Patent Office.

ANDREW RUNSTETLER AND ALBERT WINDECK, OF PEORIA, ILLINOIS.

Letters Patent No. 74,006, dated February 4, 1868.

IMPROVEMENT IN COTTON-SCRAPER AND CUTTER.

The Schedule referred to in these Letters Patent and making part of the same.

Be it known that we, ANDREW RUNSTETLER and ALBERT WINDECK, of the city and county of Peoria, in the State of Illinois, have invented a new and useful machine for cultivating cotton, called a "Cotton-Scraper and Cutter;" and we do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a perspective view.

Figure 2, a plan.

Figure 3, perspective view of a pair of the "scrapers," and

Figure 4 side elevation of scrapers.

Figure 5, underneath view of "regulator," and

Figure 6 side view of "gearing" to wheels.

This machine consists of a square frame, four feet by two feet two inches in length, and constructed of six pieces of wood, A B C D, two by three inches square each piece. This frame is supported on wheels, the axle K of which is between the two hindmost bars D E. The wheels are wood-spoked. On this axle of iron is fastened the cogged bevelled wheel J, about seven and a half inches in diameter, which turns the cogged bevelled iron pinion G, situated on the rear end of another iron axle, F, running lengthwise of frame, or from front to back, as far as former axle. On this axle F are situated the revolving hoes H H H H, which are (*i. e.*, the arms of hoes) provided with slots *d d*, allowing of the adjustment of the separate pairs farther apart on axle, and of the adjustment or shortening and lengthening of the distance of the hoes from axle. The hoes are three inches deep, and present a length of nine inches to the surface of the soil, (*i. e.*, three by nine inches.) The arms of hoes are twelve inches in length above the hoe, and about two and a half inches wide, with a half-inch slot, *d*, running down toward hoe, about half the length of arm, all made of quarter-inch steel. There can be one or two pairs of hoes to this axle, as may be found most convenient for cultivation, and our machines are constructed either way. The hoes are fastened to the iron axle F, at its flattened part, by means of a washer and bolt through the slots and axle, allowing of the shortening or lengthening of the "cut," as before intimated. The hoes are slightly turned up at the cutting-edge, so as to facilitate the cutting out the superfluous cotton-plants in the rows.

On the front part of machine are the scrapers *a b*, situated between the two front bars B C. They are two upright pieces of wood, two feet four inches high each, by inches square, and are hung about four or five inches apart on two iron pins, *m m*, passing through both the bars B C and the scraper-handles *a b*, and connected on their tops, *c c*, with the curved irons *h h*, by screws. These irons *h h* are one inch wide by eight inches long, (*h h*, fig. 5,) having a common pivot or fastening, *j*, on the under side of the "regulator" I, at its forward end, at or near the further end, or near handle of regulator, which is about three feet four inches long, and on its under side are cogs or teeth *n*, by means of which the scrapers are held in position. The regulator, by its forward or backward motion, increases or diminishes the distance between the scrapers, and the teeth *n* hold the same at the required position, by means of the catch or bar on the upright stay in front of driver's seat. The regulator, at its forward end, has an iron pin, say, half an inch in diameter, projecting from the wood far enough to admit of its sliding back and forth in the brace *p* of iron on the forward bar B. The scrapers, of thin steel, at the lower end of the scraper-arms *a b*, are upright plates, square, or nearly so, about six inches high by nine inches wide, slightly turned forward at their lower edges. The outer side of each scraper is turned backwards, about fifteen degrees from the front line of machine, and being intended to scrape the sloping sides of the cotton-ridge, (one on each side,) they have (*i. e.*, the cutting-edges) an inclination from the space between them to each of their outward angles. Thus these scrapers remove the superfluous plants and weeds to any extent on each side of the sloping ridges simultaneously, leaving a growth of cotton-plants, say, from two and a half to three inches wide, on the ridge between the scrapers. The running-gear can be thrown out of operation, when required, by means of the levers L M on each side, and next wheels, by pressing them down against the hubs of spoked wheels, as may be seen by drawings. A diagram of lever is seen at fig. 6.

The operation of the machine is as follows: The driver rides upon the seat fixed upon the rear part of the frame, from which he regulates the action of the machine. Thus, on starting for the field, the lever M is pressed down, so throwing the cogs out of gear. When ready to hoe, the operation is reversed, and the lever L is depressed, as shown in fig. 2. The scrapers, by means of the pins *m m*, are kept at the necessary height to avoid striking ground, and the arms *c c* of scrapers being pierced with holes, their height or depth is easily regulated, when ready to begin, and the distance between scrapers is regulated by the arm or regulator I, which operates on the upper end of the scrapers at *c c*; a forward motion of same diminishing their distance, and reverse motion extending same.

The machine is designed to supply the place of many field-hands, doing the work expeditiously and neatly, the hoes following the scrapers, cutting away transversely, each revolution, a space of superfluous plants, say, nine inches in length, leaving a growth of plants three inches long between each cut, thus leaving room for a thrifty growth of the tender plants. Two horses are sufficient for the draught.

What we claim as our invention, and desire to secure by Letters Patent, is—

1. The mode, substantially as set forth, of adjusting the scrapers *c c*, by means of curved irons *h h* connected with the regulator I.
2. The combination of a driver's seat, the levers M and L for controlling the action of the revolving hoes H H, and the regulator I for controlling the scrapers, substantially as set forth.

ANDREW RUNSTETLER,
ALBERT WINDECK.

Witnesses:

EDMUND THURLOW,
N. BAKER.