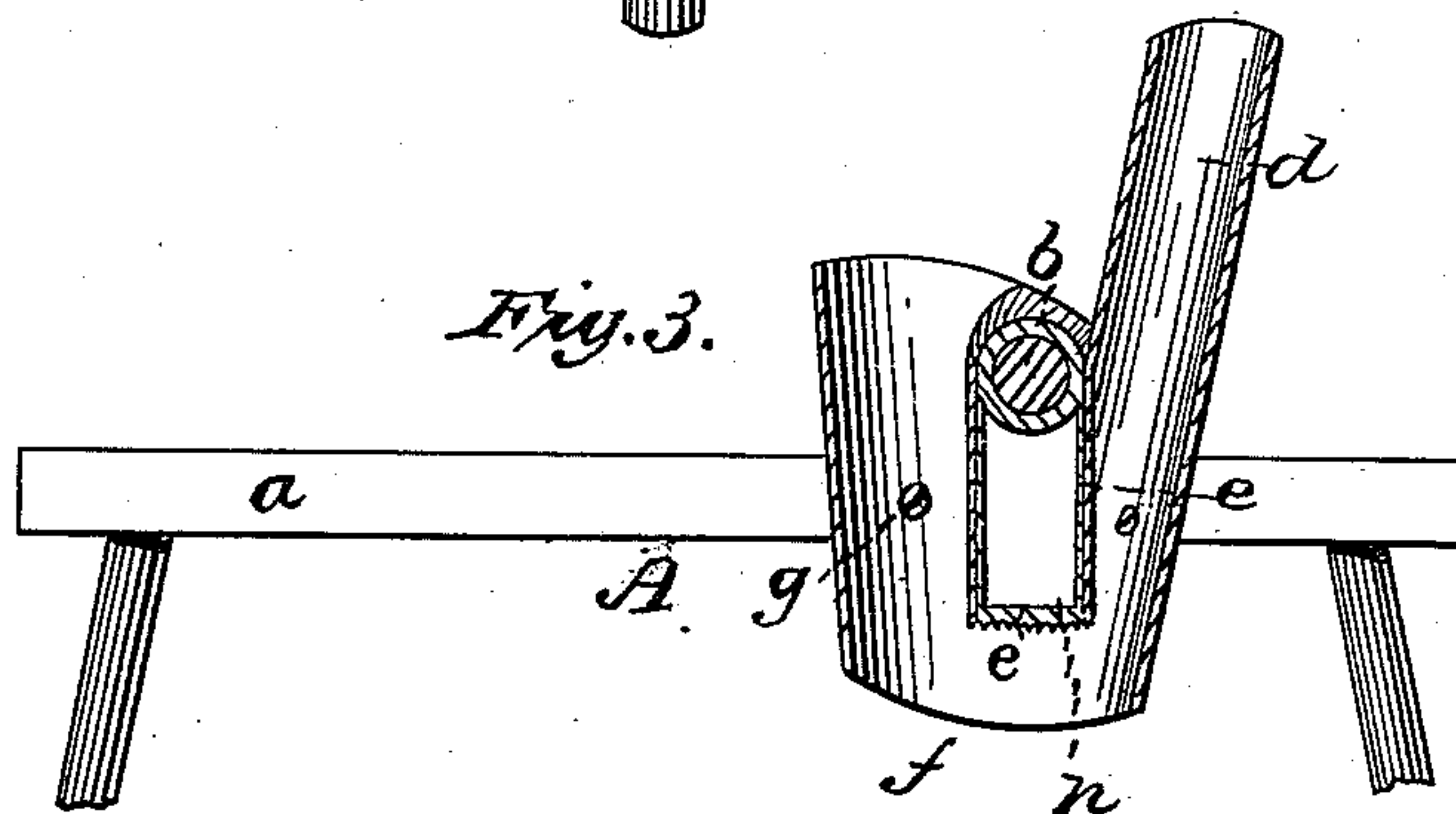
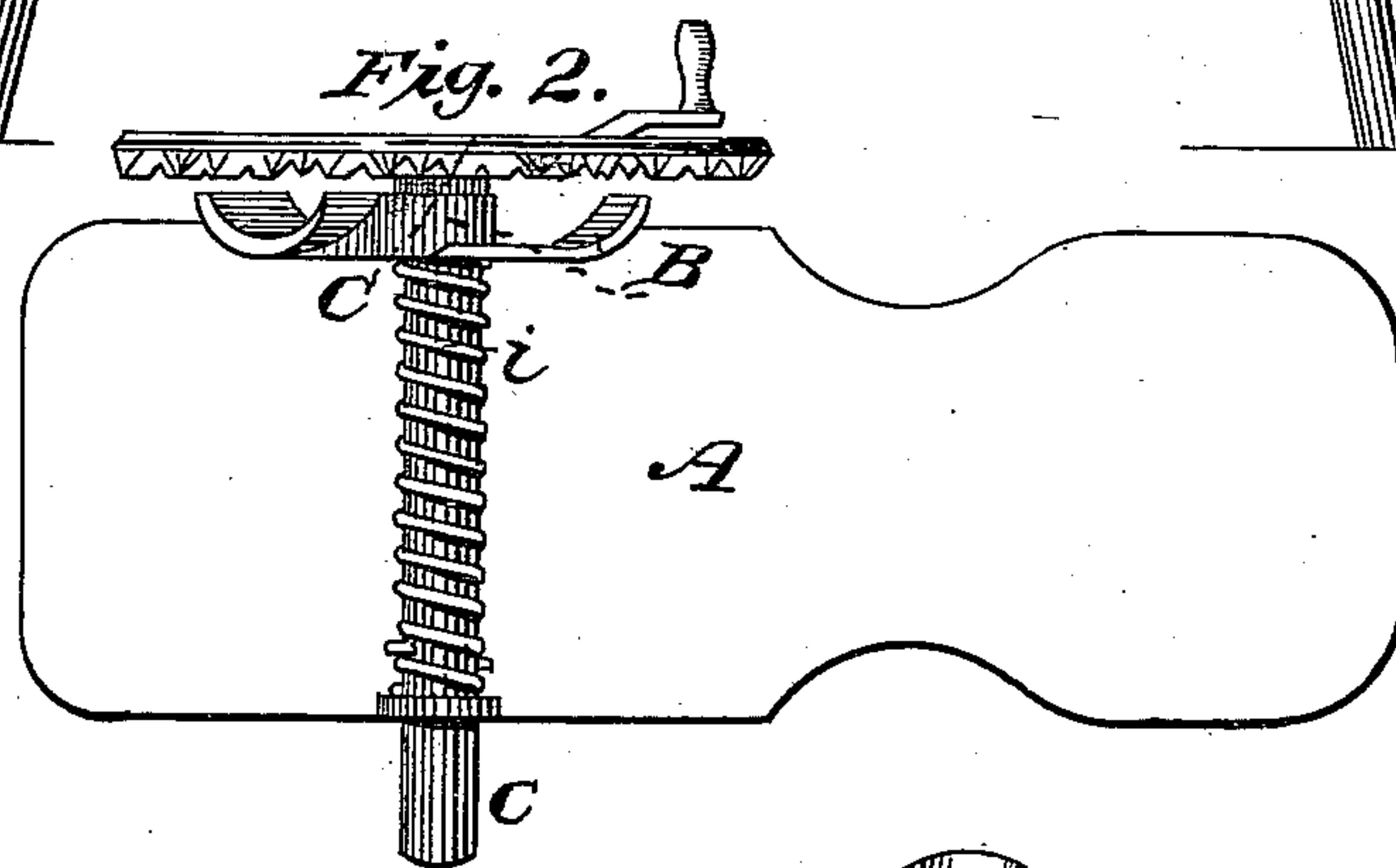
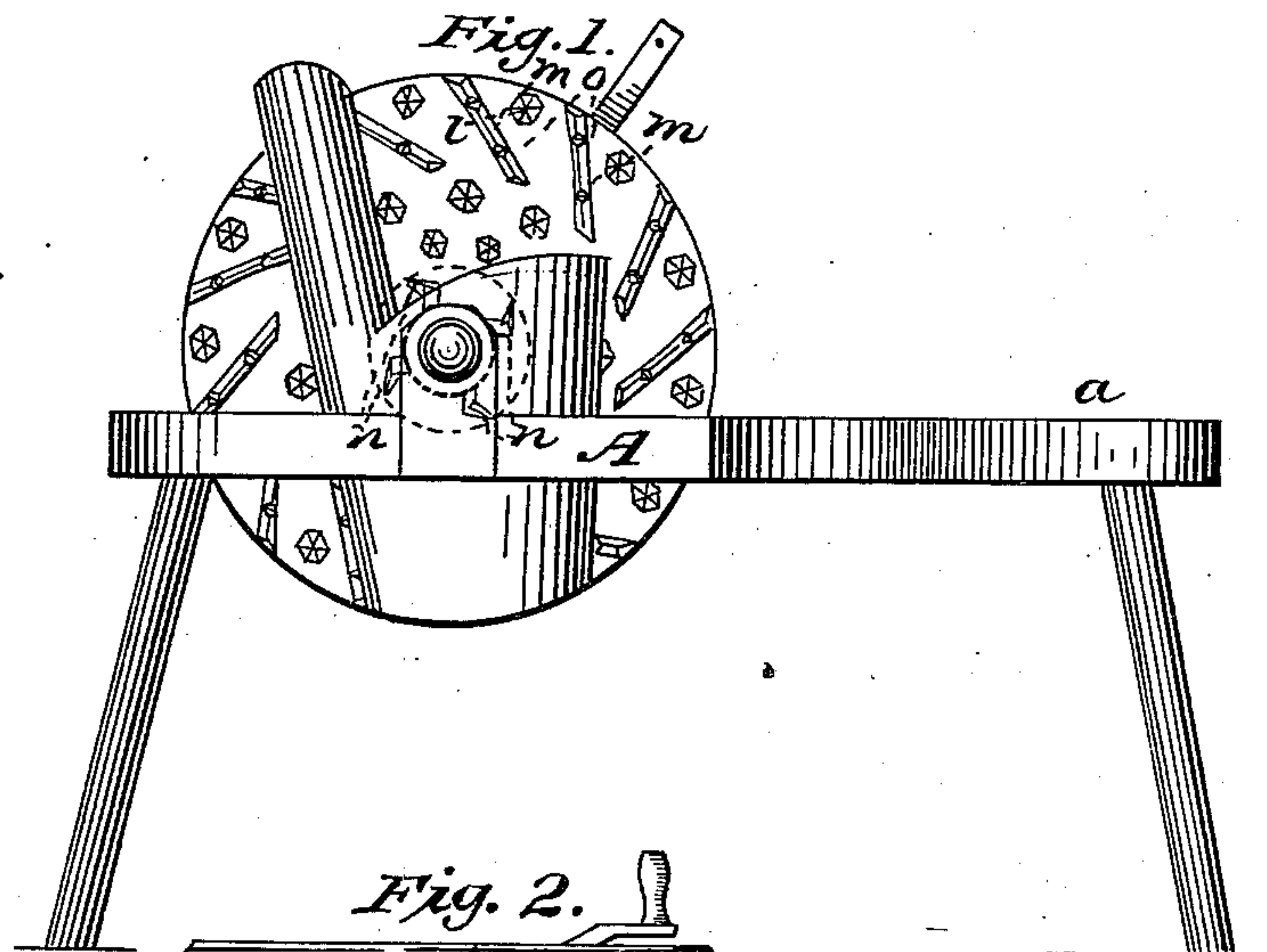


J. P. SMITH.

Corn Sheller.

No. 85,035.

Patented Dec. 15, 1868.



WITNESSES:
Henry Conner
N. S. Turner,

INVENTOR
J. P. Smith
By his atty
J. L. Brown,

United States Patent Office.

J. P. SMITH, OF HUMMELSTOWN, PENNSYLVANIA.

Letters Patent No. 85,035, dated December 15, 1868.

IMPROVEMENT IN CORN-SHELLERS.

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

To all whom it may concern:

Be it known that I, J. P. SMITH, of Hummelstown, in the county of Dauphin, and State of Pennsylvania, have invented an Improved Corn-Sheller; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of this specification.

Figure 1 is a side elevation of the corn-sheller.

Figure 2, a top view thereof.

Figure 3, a side view of the bench or stand, and stationary concave or tube-plate attached thereto, the shelling-wheel being removed.

Like letters designate corresponding parts in all the figures.

This is a hand-sheller, composed of a bench, A, with a seat, *a*, a concave or tube shelling-plate, B, attached to the side of the bench, and a shelling-wheel, C, provided with shelling-teeth, and revolving in proximity to the stationary shelling-plate, toward which it is pressed by a spring, *i*, on its shaft, *c*, so that the space between the shelling-wheel and shelling-plate may vary according to the size of the ear, while shelling.

The ears are fed into a nearly vertical tube or concave, *d*, in the face of the shelling-plate, down which tube the action of the shelling-wheel forces them; thence they are turned, by the circular action of the shelling-wheel, sidewise, along a space, *f*, at the bottom of the concave, into a second tube or concave, *g*, through which they are caused to ascend by the action of the said shelling-wheel; and, finally, the shelled cobs are ejected at the top thereof, to be taken away.

The face of the shelling-wheel C, except where otherwise occupied, is provided, at suitable distances, with pointed teeth, *l l*, substantially as shown, and they require no further description.

I employ a set of oblong, and, preferably, somewhat forwardly-curved teeth, *m m*, situated obliquely on the face of the shelling wheel, near its periphery, and provided with notches, *o o*, in their sharp ridges.

Their oblique inclination is forward at their outer extremities, in the direction of the motion of the wheel, and their function is not only to assist in removing the grains of corn, but to impart a slowly-revolving motion to the ears of corn, as well as a forward-feeding motion, the combined effect of its action, in connection with the

concaves or tubes *d g*, being to move the upper ends (at start) of the ears around, as it were, in the arc of a circle, or in curves, approximating as nearly as the shape of the stationary tubes which they traverse will allow. Thus, if the tips of the ears are inserted downward in the tube or concave *d*, the effect of the oblique teeth *m m* on the ears will be to move the butts fastest, or in the outer curves of the circuit traversed, while the tips will continue to hug the inner edges *e e* of the tubes or concaves.

The first feature of improvement consists in a set of pointed teeth, *n n*, near the shaft of the shelling-wheel, being not merely flat but concave on their front sides, so that they will surely seize the ears and move them forward, as well as assist in removing the grains of corn. These teeth act upon the tips and inner sides of the ears, and serve to give a slow-feeding motion to those parts, while the more rapidly-moving teeth *m m* are feeding the butts of the ears round in their enlarged circuit.

The second feature of my invention consists in a set of teeth or notches, *h h*, at the upper edge of the connecting-space *f*, between the two tubes or concaves *d* and *g*, for the double purpose of completely shelling off all grains of corn on the extreme tips of the ears, and to furnish a retarding-fulcrum or rest, against which the tips of the ears bear, as the shelling-wheel is bringing the butts of the ears round from one concave to the other.

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

The teeth *n n*, near the shaft of the shelling-wheel, arranged and operating, in combination with the concave plate, substantially as set forth.

Also, the notches *h h* on the concave plate, arranged and operating, in combination with the shelling-wheel, substantially as and for the purpose herein specified.

The above specification of my improved corn-sheller signed by me, this 21st day of April, 1868.

J. P. SMITH.

Witnesses:

ABNER HUMMEL,
BENJ. F. HUMMEL.