FLETCHER & PIKE.

Corn Sheller.

No. 26,662. Patented Jan'y 3, 1860.

Fig. 1.

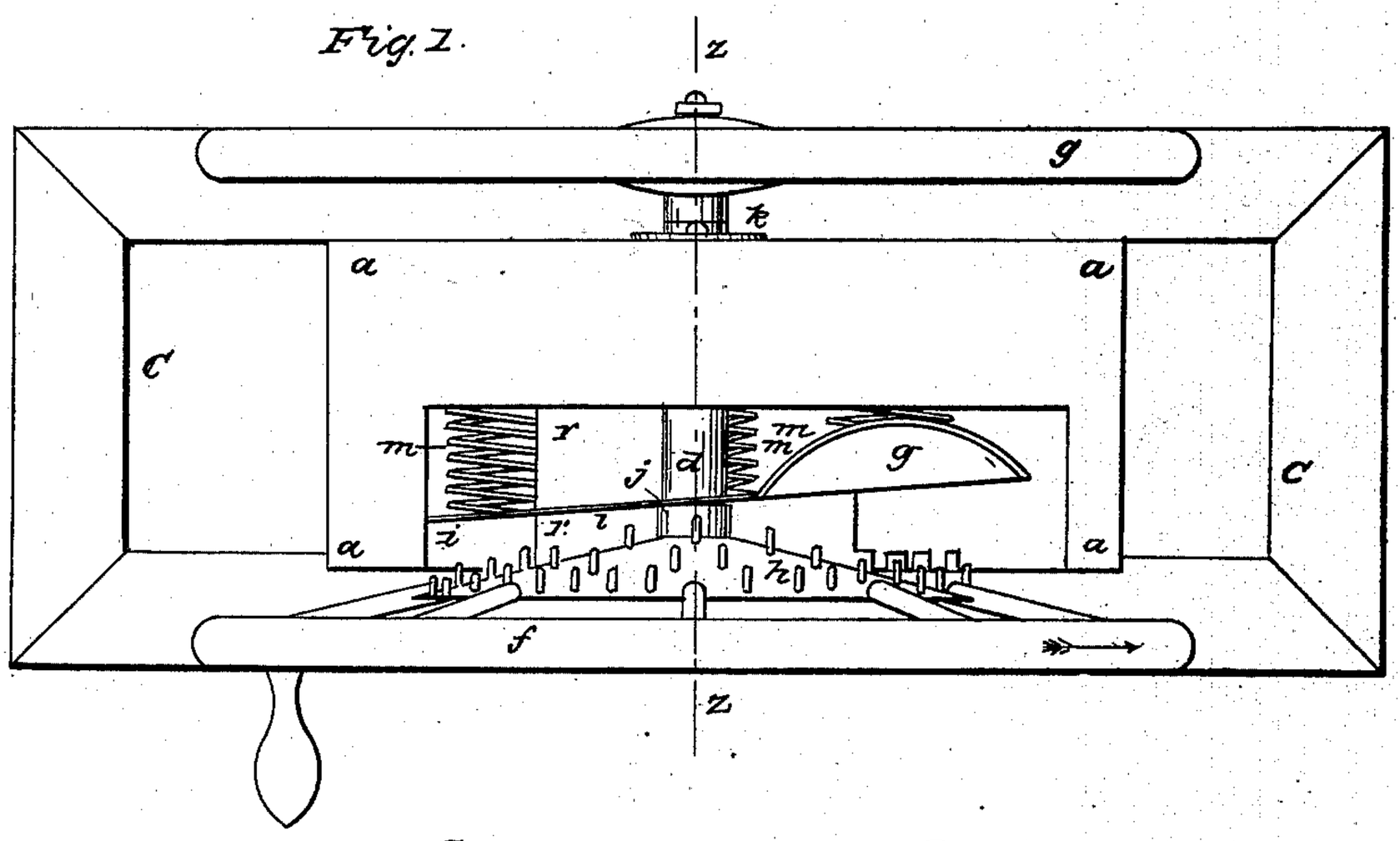
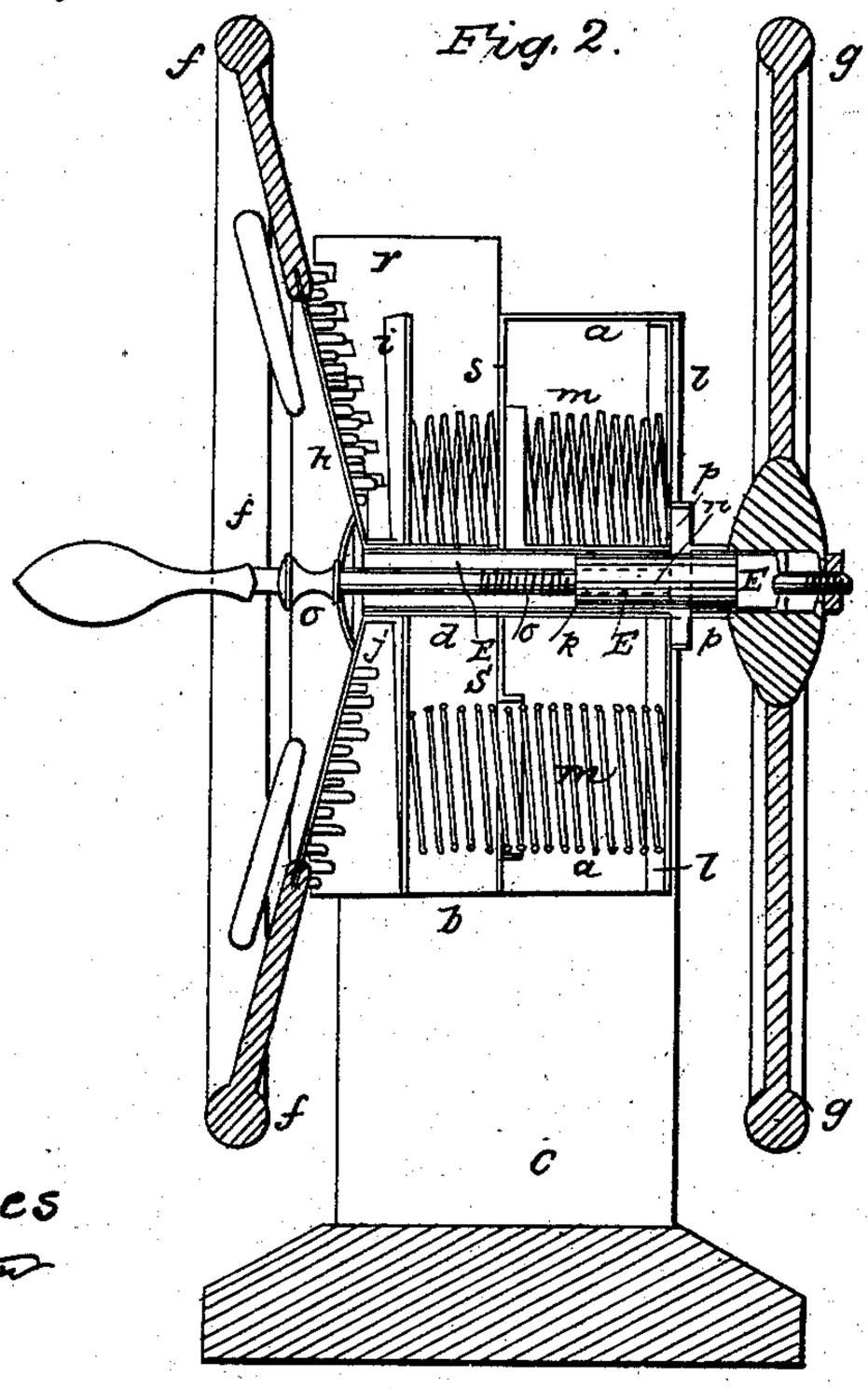


Fig. 2.



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UNITED STATES PATENT OFFICE.

SETH FLETCHER AND JNO. P. PIKE, OF BLOOMFIELD, MAINE.

CORN-SHELLER.

Specification of Letters Patent No. 26,662, dated January 3, 1860.

To all whom it may concern:

Be it known that we, SETH FLETCHER and J. P. PIKE, of Bloomfield, in the county of Somerset and State of Maine, have invented certain new and useful Improvements in Corn-Shellers; and we do hereby declare that the following, taken in connection with the drawings which accompany and form a part of this specification, is a description thereof so full and exact is to enable those skilled in the art to practice our invention.

Figure 1 is a plan of the sheller and Fig. 2 is a vertical cross section through it taken in the plane of line *z*, *z*, seen in Fig. 1.

Similar letters refer to similar parts in both figures.

(*a*) as a metallic casing fixed to and supported by suitable standards (*b*) rising from the foundation plate (*c*). The tube (*d*) which forms part of (*a*) supports the shaft (*e*) which carries the balance wheels (*f*) and (*g*). To the arms of (*f*) the shelling disk or cone (*h*) is fixed or it may be made an integral part of (*f*). The presser plate (*i*) fits loosely over the tube (*d*) and is prevented from too nearly approaching the shelling wheel by the collar (*j*). The shelling wheel has suitable teeth or projections upon it as shown in the drawings, and the presser may also be furnished with ridges or asperities to assist in removing the corn. Fitting loosely over the tube (*k*) upon shaft (*e*) is the follower plate (*l*) having springs (*m*) fixed to it so that when (*l*) is in its place within the casing (*a*) as shown in the drawings the springs shall press upon the presser-plate (*i*) and bear it toward the shelling wheel (*h*) keeping (*i*) against collar (*j*). The shaft (*e*) is made hollow and has within it the sliding piece (*n*) in which the screw (*o*) fits by rotation of which (*n*) is drawn toward (*h*). The pin (*p*) fitting in (*n*) and passing through slots in the shaft and in the sleeve (*k*) thereon, bears upon (*l*) so that when (*n*) is drawn forward by the action of (*o*) it will compress the springs (*m*) against plate (*l*) forcing this forward against the ears of corn which are interposed between (*l*) and (*h*). Thus it will be seen that by turning the screw (*o*) in one or the other direction the intensity of the shelling action of the wheel may be increased or diminished at pleasure. The looseness of the fits of the plates (*i*) and (*l*) over tube (*d*) and sleeve (*k*) allow both plates (particularly *i*) to yield to the various diameters of ears of corn subjected to the action of the machine and also to follow the constantly decreasing diameter of each ear while subject to the action of the machine. The plate (*i*) has a concavity formed from its face side at (*q*) which serves as a hopper into which the ears of corn are introduced.

The guard (*r*) which may form part of the casing (*a*) projects from the central plate (*s*) of the casing toward the shelling wheel having suitable spaces cut in its edge to permit passage of the shelling teeth. The casing (*a*) also extends toward (*h*) with similar spaces cut in its edges.

Having described the construction of our corn-sheller its action may be set forth as follows: Rotation being given in the indicated direction and an ear of corn being dropped into the hopper it is carried by the rotation of the shelling wheel around with it (being rotated on its own axis at the same time) until the cob strikes against the guard (*r*) when it is discharged upward from the machine entirely cleared from the corn even to the point, the shelled corn falling into any convenient receptacle placed beneath the machine.

It should be particularly remarked that while a loose or "wabbling" and self-adjusting presser plate acted on by springs and capable of being regulated to press with a varied force is common to previous corn shellers, there is in the present arrangement and combination of parts connected with the presser plate (*i*) a peculiar gain and efficiency by the employment of the follower (*l*) with its springs (*m*) made in relation to the shelling wheel centrally adjustable and the follower plate centrally hung by means of the hollow wheel shaft (*e*) and interior screw (*o*), the same serving to give a most perfect accommodating action to the presser plate, and, by turning the one screw, equal adjustment of the several springs, and said adjustment being effected from the outside or in front of the feed (*q*) and shelling wheel (*h*) where it is more convenient to

adjust the action of the presser as it is there that the feeder or operator stands.

What we claim therefore, herein, is:

The combination and arrangement with the loosely hung presser plate (*i*) and revolving shelling wheel (*h*), of the follower plate (*l*) with its springs (*m*), hollow wheel shaft (*e*), and centrally arranged regulating screw (*o*), for operation in relation to each other and unitedly essentially as specified.

SETH FLETCHER.
JOHN P. PIKE.

Witness to S. F.:
EUSEBIUS WESTON.
Witnesses to J. P. P.:
J. B. CROSLY,
W. B. GLEASON.