Sheet 1. 2 Sheets.

S. Lowell,

Flanging Mach.

No. 93,320. Patented Aug. 3. 1869.

Fig. 2.

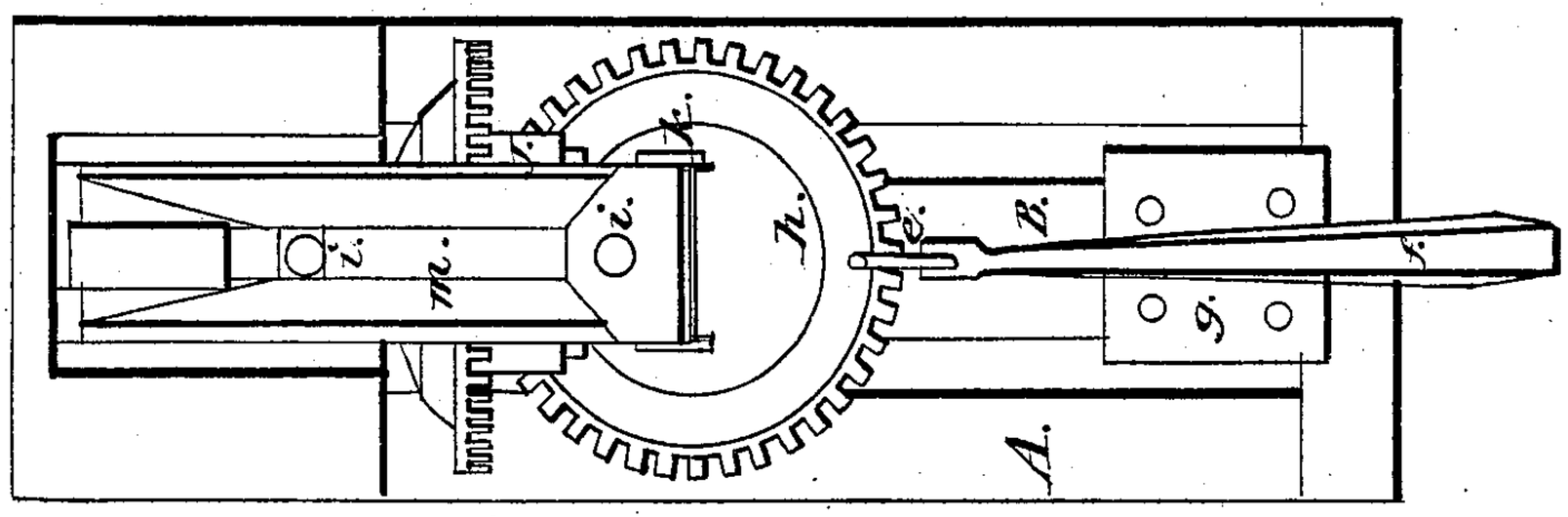
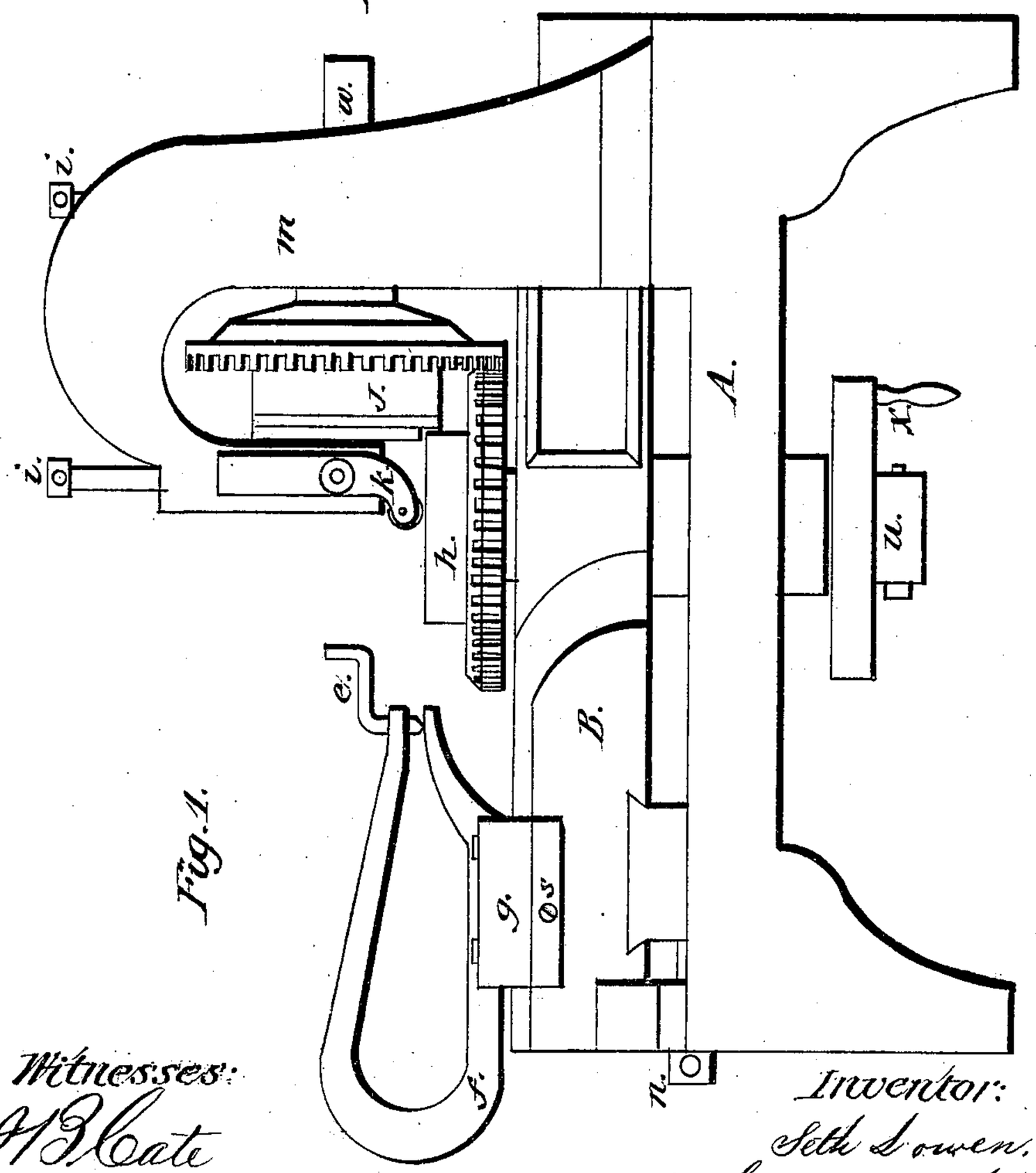


Fig. 1.



Witnesses:
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A. C. Johnston.

Inventor:
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By his attorney J. J. Johnston

Sheet 2. 2 Sheets.

S. Lowen,

Flanging Mach.

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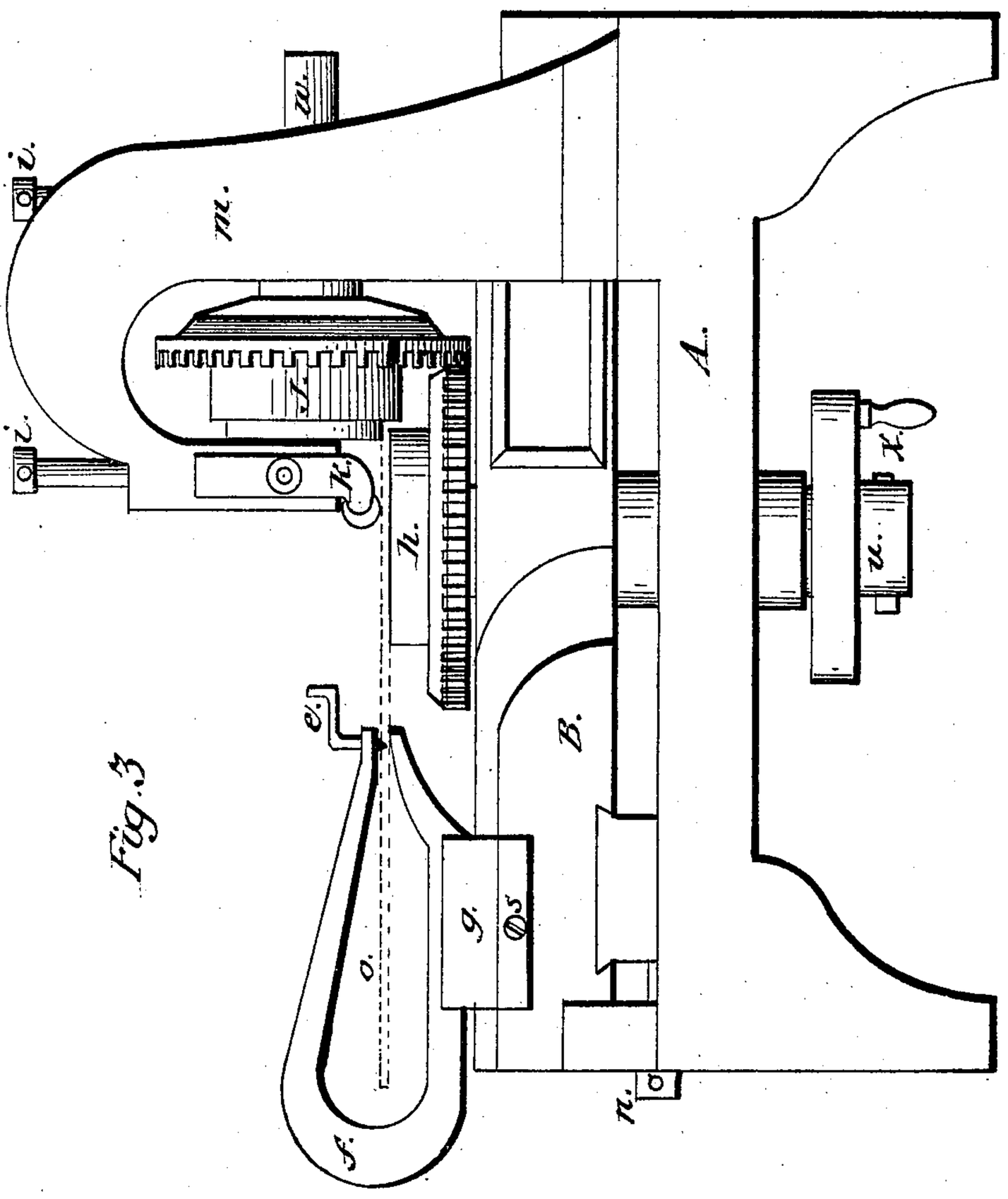

Fig. 3

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UNITED STATES PATENT OFFICE.

SETH LOWEN, OF TEMPERANCEVILLE, PENNSYLVANIA, ASSIGNOR TO HIMSELF AND O. D. LEVIS.

IMPROVED FLANGING-MACHINE.

Specification forming part of Letters Patent No. **93,320,** dated August 3, 1869.

To all whom it may concern:

Be it known that I, SETH LOWEN, of Temperanceville, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Flanging-Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in the combination and arrangement of an adjustable centering-piece, adjustable flanging-disks, and friction-rollers, said centering-piece, flanging-disks, and rollers being constructed, arranged, and operating with relation to each other as hereinafter set forth.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

In the accompanying drawings, which form part of my specification, Figure 1, Sheet A, is a side elevation of my improvement in flanging-machines. Fig. 2, Sheet A, is a top view or plan of the same. Fig. 3, Sheet B, is a side elevation of the same, and represents a plate arranged in the machine for being flanged.

In the accompanying drawings, A represents an iron frame, provided with an upright piece, *m*, in which are arranged adjustable bearings for the shaft *w* of the disk J. To one of the bearings of the shaft *w* are attached friction-rollers *k*, which are used for the purpose of holding the plate *o* to be flanged down on the disk *h*, the shaft *u* of which has its bearing in the piece marked B, which may be moved back and forward on the frame A through the medium of the screw *n*. The bearings of the shaft *w* and the friction-rollers *k* are raised and lowered through the medium of the screw *i*. The adjustable centering-piece, consisting of the parts *g*, *f*, and *e*, is so arranged with relation to the piece B that it can be moved back and forward on the piece B, so as to change the position of the center point, *e*, with relation to the disks *h* and J. The part of the centering-piece marked *g* is fitted to the part so that it will move back and forward on a straight line with the center of the disk *h*, and is held in a fixed position at the point desired by means of the set-screw *s*. The object of arranging the several parts so that they can be adjusted as hereinbefore described is for the purpose of adapting the machine to the flanging of plates of different diameters and of different thicknesses.

As the construction of my improvement in flanging-machines and the relation that the several parts bear to each other will readily be understood from the foregoing description and by reference to the accompanying drawings, therefore, without further description of its construction, I will proceed to describe its operation, which is as follows: The disks *h* and J and the centering-piece are adjusted and arranged to suit the diameter and thickness of the disk or boiler-head to be flanged. The disk or plate *o* for the boiler-head is then placed in the centering-piece, as shown in Fig. 3 of Sheet B. The centering-point *e* is then turned or screwed down, so as to form a pivot or axis for the revolving of the plate *o*. Motion is then imparted to the disk by applying power to the crank *x* and the revolving of the disk *h*. The disk J will be revolved through the medium of gear-teeth on disks *h* and J, which mesh into each other, and the revolving of the disks *h* and J will rotate the plate or disk *o* and bend down the desired flange around on the periphery of the plate or disk *o*, as indicated in Fig. 3. The disk J is then raised up through the medium of the screw *i* and the pivot *e* turned so as to release the plate or disk *o*, which is then removed from the machine, which is ready for receiving another plate.

Having thus described the nature, construction, and operation of my improvement, what I claim as of my invention is—

The combination and arrangement of the adjustable centering-piece consisting of parts *g*, *f*, and *e*, slide B, disks *h* and J, and adjustable friction-rollers *k*, the whole being constructed and operating substantially as herein described, and for the purpose set forth.

SETH LOWEN.

Witnesses:

A. C. JOHNSTON,

JAMES J. JOHNSTON.