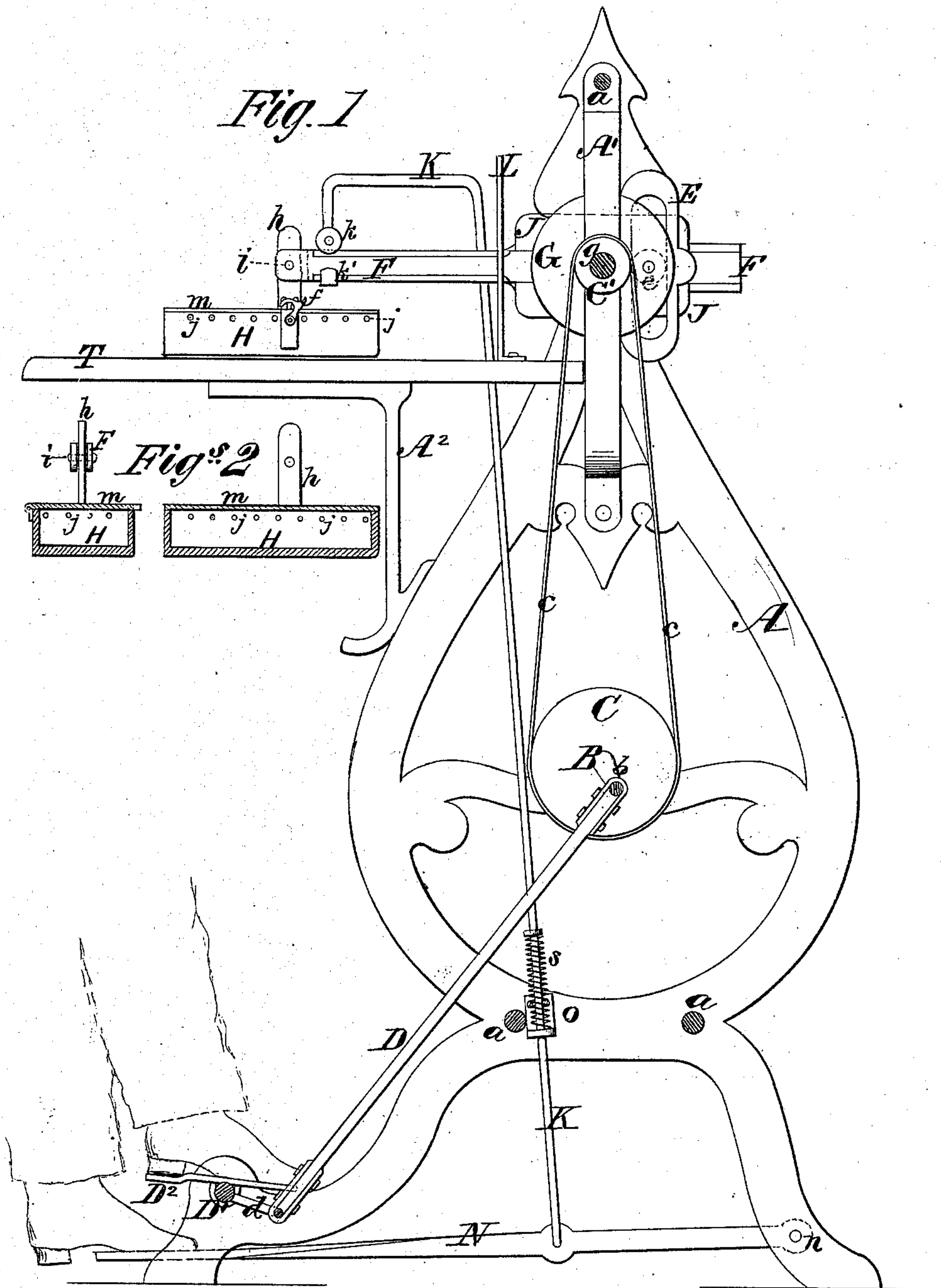


C. F. PARKER.
IRONING MACHINE.

No. 107,714.

Patented Sept. 27, 1870.



Witnesses.
R. S. Campbell
J. W. Campbell

Inventor
Chas. F. Parker
by
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Fig. 3

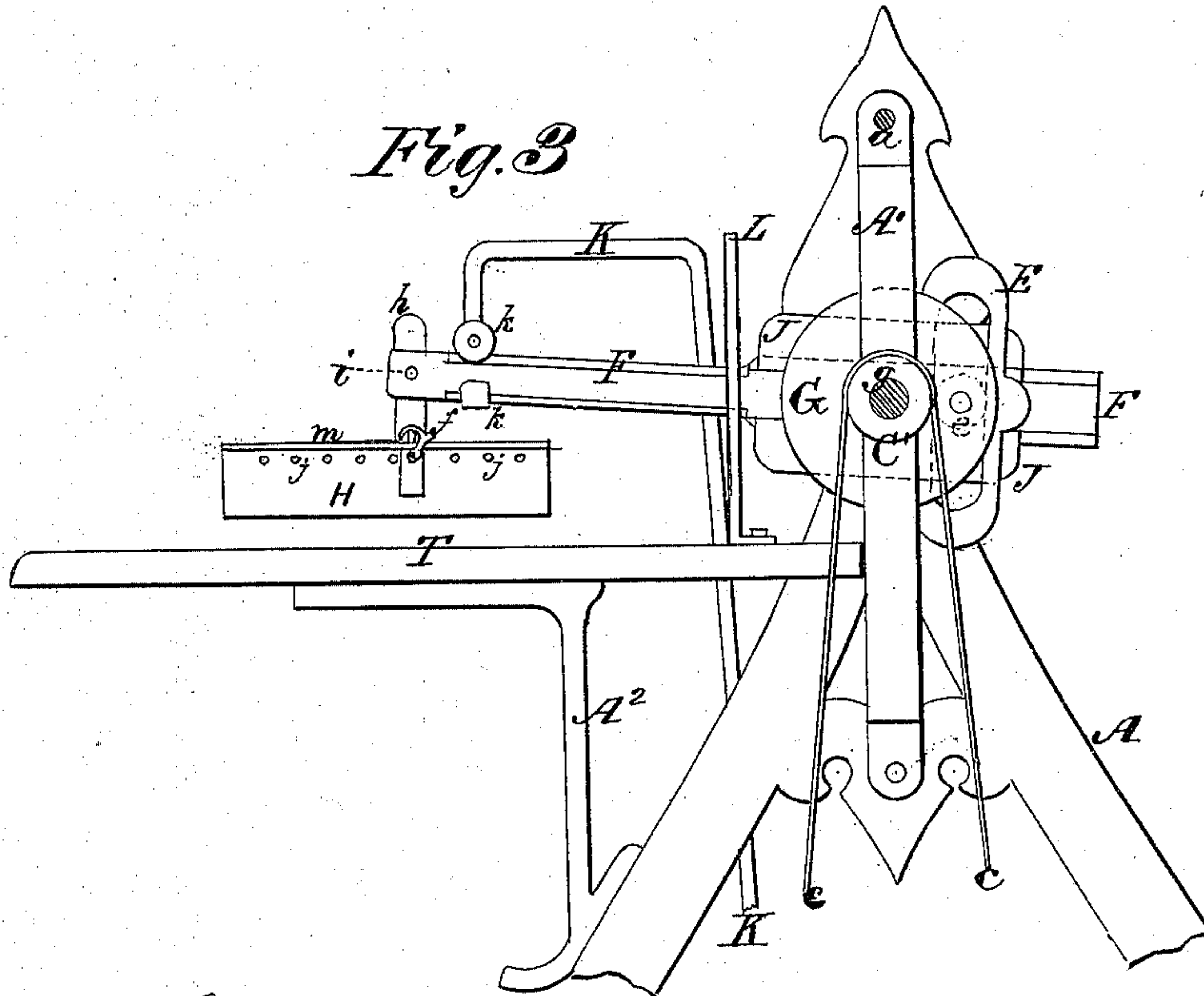
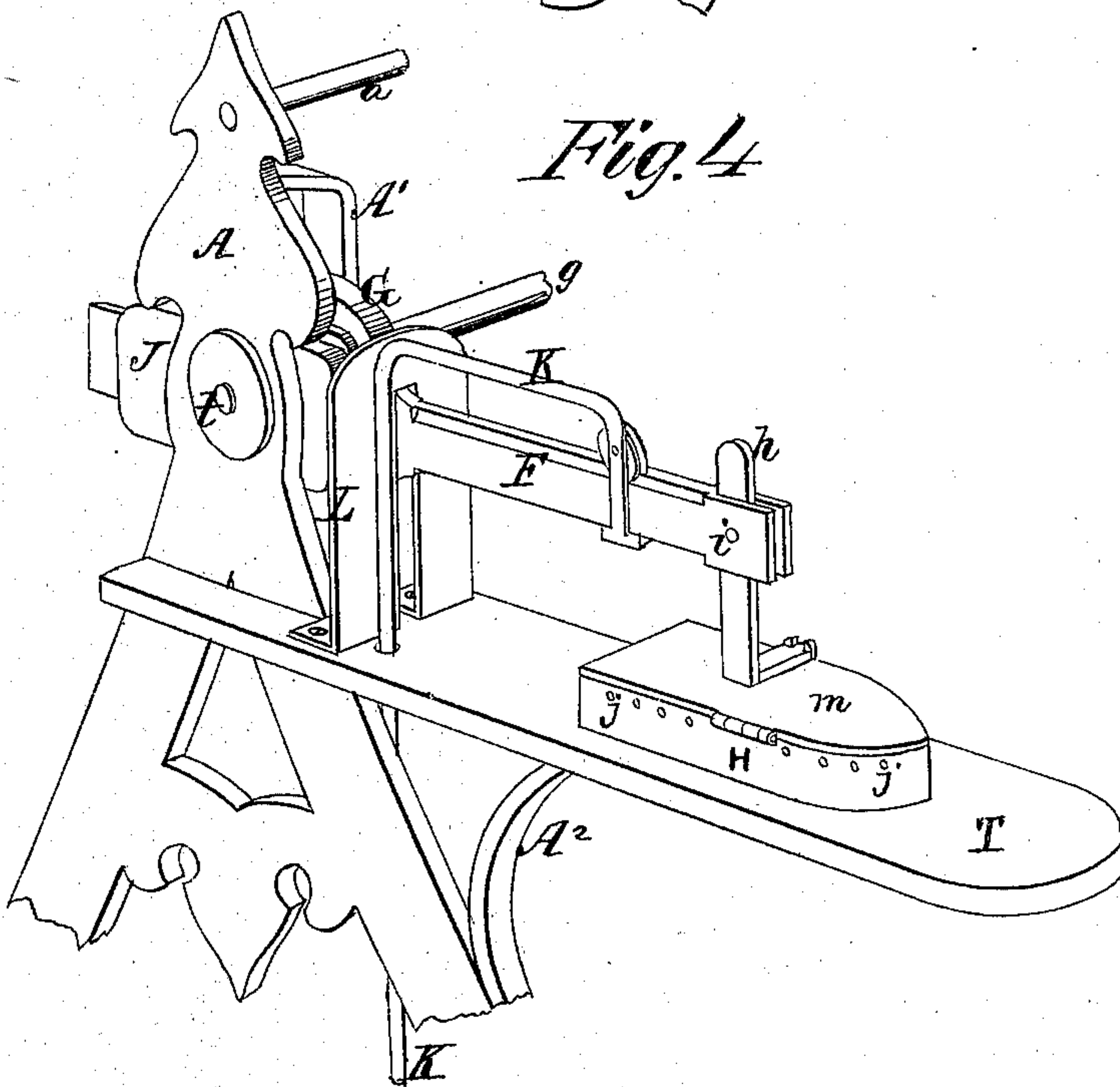


Fig. 4



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CHARLES F. PARKER, OF GREENFIELD, ASSIGNOR TO JOSEPH PARKER, OF
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Letters Patent No. 107,714, dated September 27, 1870.

IMPROVEMENT IN IRONING-MACHINES.

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, CHARLES F. PARKER, of Greenfield, in the county of Highland and State of Ohio, have invented a new and improved Ironing-Machine; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing, making part of this specification, in which—

Figure 1, plate 1, is a sectional elevation of the improved machine, representing the smoothing-iron pressed down upon the table, in position for operation.

Figure 2 are different sections of the smoothing-iron.

Figure 3, plate 2, is a sectional view in detail, showing the iron elevated above the table.

Figure 4, plate 2, is a perspective view of the upper parts of the machine, as seen from one side thereof.

Similar letters of reference indicate corresponding parts in the several figures.

This invention relates to certain novel improvements on machinery which is designed for ironing articles of clothing and fabrics of various kinds.

It consists—

First, in the employment of a smoothing-iron, which is adapted for being heated by fire made inside of it, or in any other manner, in conjunction with a rectilinear reciprocating arm, to which said iron is connected by a jointed arm, as will be hereinafter explained.

Second, in a vibrating reciprocating arm, which carries a smoothing-iron on one end, and which is arranged over a suitable table, in combination with a device which will enable the attendant, while stationed at the machine, to apply the required pressure to the iron, and control this pressure at will, as will be hereinafter explained.

Third, in the arrangement of a pressure-treadle and an oscillating treadle in such relation to an ironing-table which has arranged over it an arm which carries a smoothing-iron, that the attendant, while sitting at the machine, in front of the said table, can communicate motion to the said iron, and at will apply pressure to it by means of his feet, as will be hereinafter explained.

To enable others skilled in the art to understand my invention, I will explain its construction and operation.

In the accompanying drawing—

A represents one of two standards, which are connected together in upright positions by means of horizontal bars, *a a a*, thus constituting the frame for sustaining the several parts composing the improved machine.

Near the upper end of this frame, and supported

thereby in a horizontal position, is a rotary shaft, *g*, carrying a small belt-drum, *C'*, and also a disk, *G*.

One end of this shaft *g* is sustained by and terminates in the staple-bearing *A'* of the frame *A*.

Below the shaft *g*, and sustained by the standards of the frame *A*, is a crank-shaft, *B*, carrying a large belt-drum, *C*, around which latter, and the smaller drum *C'*, is passed the belt *c*, as shown in fig. 1, plate 1.

To the crank *b* of shaft *B*, a pitman, *D*, is applied, the lower end of which is connected to an arm, *d*, of an oscillating shaft, *D'*.

This shaft *D'* is arranged in front of and near the base of frame *A*, and has applied to it, beneath an ironing-table, *T*, a foot-stand, *D''*, on which the attendant places his foot.

By oscillating the shaft *D'*, rotary motion is given to the shaft *g*, through the medium of arm *d*, pitman *D*, crank-shaft *B*, drums *C C'*, and belt *c*.

The shaft *B* should have a fly or balance-wheel applied to it, which is not shown in the drawing.

On one side of the face of the disk *G* a wrist-pin, *e*, is applied, which plays in a slotted yoke, *E*, made fast to one side of an arm, *F*.

This arm *F* is, in part, fitted to slide in a guide-block, *J*, which is connected to the standard *A*, by means of a pivot, *t*, shown in fig. 4.

The rotary motion given to the crank-disk *G* will impart a rectilinear reciprocating motion to the arm *F*, and the pivot *t* will allow this arm to vibrate vertically with the guide-block *J*.

To that end of the arm *F* which overhangs a horizontal table, *T*, an arm, *h*, is applied, by means of a pivot, *i*, and to the lower end of this arm *h* a smoothing-iron, *H*, is secured.

The pivotal attachment at *i* will allow the iron to swing freely, and accommodate itself flatly to the table *T*, and to articles adjusted thereon to be smoothed.

The arm *h* is secured to the top plate *m* of the smoothing-iron *H*, which plate is hinged to the body of this iron, on one side, and provided with a fastening, *f*, on the other side.

The iron shown in the drawing is made hollow, and perforated by draught-holes at *j*, and otherwise adapted for containing within it the fire which is to keep it hot.

A charcoal fire may be kept up in the iron; its motion, while in operation, and the draught-holes *j*, through its sides, will keep up the fire; or, if desired, the iron may be heated by gas, using, for this purpose, a flexible tubular connection between it and the stationary gas-pipe.

Between the iron *H*, and the crank-wheel *G*, and guide-block *J*, a shield, *L*, rises from and is secured to the table *T*. Through a vertical slot in this shield

the arm F plays freely. This shield will protect articles placed on the table T from contact with the driving mechanism.

The arm F is supported, near the iron H, by means of a stirrup, *k*, applied to the overhanging end of a treadle-rod, K.

Directly over this stirrup *k*, and applied to the rod K, is a grooved pressure-roller, *k*, which impinges upon the upper edge of arm F; thus the arm F plays longitudinally between the stirrup *k* and pressure-roller *k*.

The rod K passes down through the table T, and through a guide, O, and is attached, at its lower end, to a vertically-vibrating treadle, N, which is pivoted to the standard A, at *n*, and provided, at its free end, with a foot-piece, on which the operator places his foot, and applies pressure during the operation of ironing.

A spring, *s*, is applied to the rod K, of such strength, and in such manner as to lift that portion of arm F which is over the table T, together with the smoothing-iron H, free from this table, when the attendant relieves the free end of treadle N from pressure, and sustain said parts in the position shown in fig. 3.

The treadle and its connections, with the arm F, allows the attendant, with his left foot, and while operating the machine with his right foot, to apply and control the pressure upon the iron, and when desired, to allow spring *s* to raise this iron from the table.

The table T is an oblong board, with a rounded end, applied to frame A, and sustained in part by the bracket A² of this frame. The table may be so applied that it can be removed at pleasure, and another, of different size, substituted in its stead.

If it is desired to shorten or to lengthen the strokes of the arm F, the wrist-pin *e* may be made radially adjustable on the crank-disk G.

It will be seen from the above description, and by reference to fig. 1, that both treadles, D² and N, are arranged in such relation to the table T that a person sitting at the machine so as to manipulate the work on said table, can conveniently operate the machine, and apply pressure to the iron, and regulate this pressure with the feet, thus leaving both hands free.

Having described my invention,

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

1. The combination of a smoothing-iron, with a rectilinear reciprocating arm, F, and a pivoted guide, J, for said arm, substantially as described.
2. The combination of a pressure device, with a reciprocating arm, F, carrying on one end a smoothing-iron, substantially as described.
3. The relative arrangement of treadles D² and N, with an ironing-table, a reciprocating smoothing-iron, and a pressure device, substantially as described.
4. The combination of a vertically-movable guide-block, J, a reciprocating arm, F, carrying on one end a smoothing-iron, and a pressure device, substantially as described.
5. The pressure-rod K, supported upon a spring, *s*, and adapted to support the arm F, by means of a stirrup, *k*, substantially as described.

CHARLES F. PARKER.

Witnesses:

J. N. CAMPBELL,
EDM. F. BROWN.