(No Model.) 2 Sheets—Sheet 1.

# W. H. DAVEY & H. FABIAN.

## IRONING MACHINE.

No. 291,035. Patented Jan. 1, 1884.

Fig. 4.

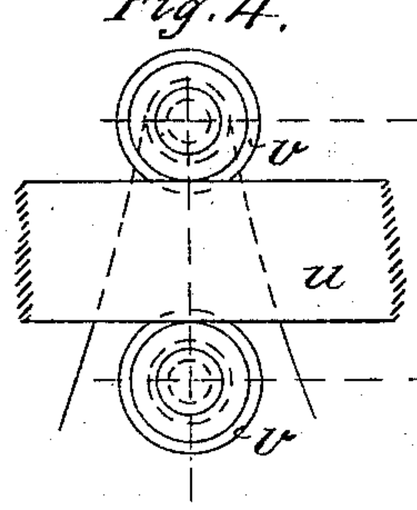



Fig 3

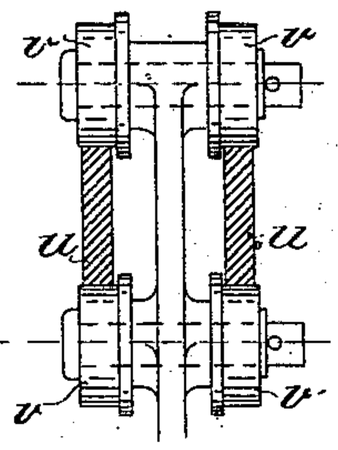
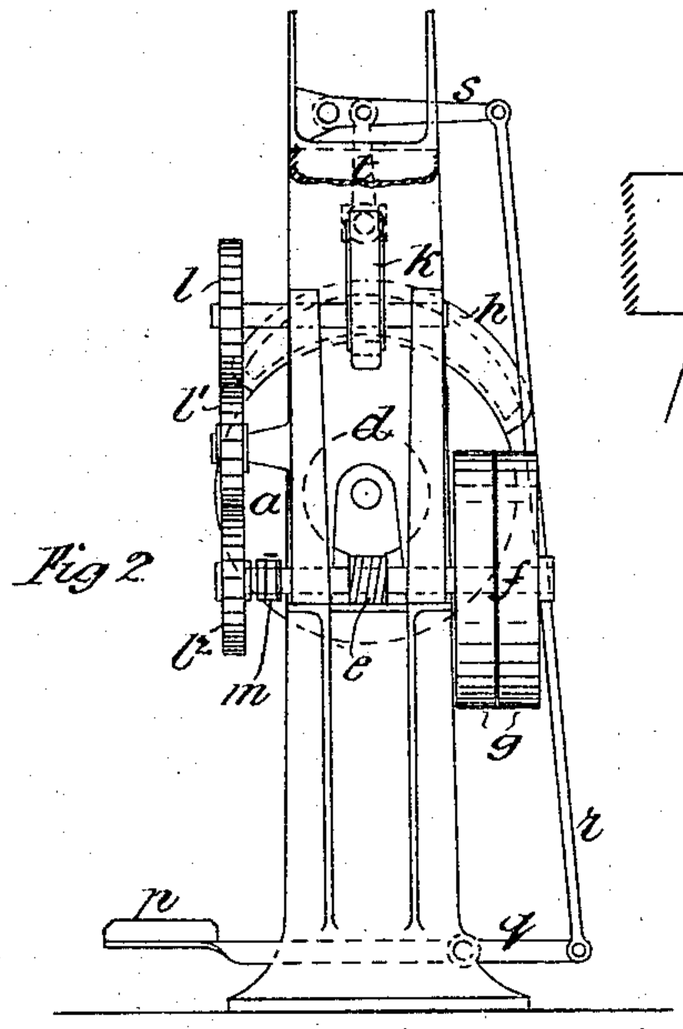



Fig 2



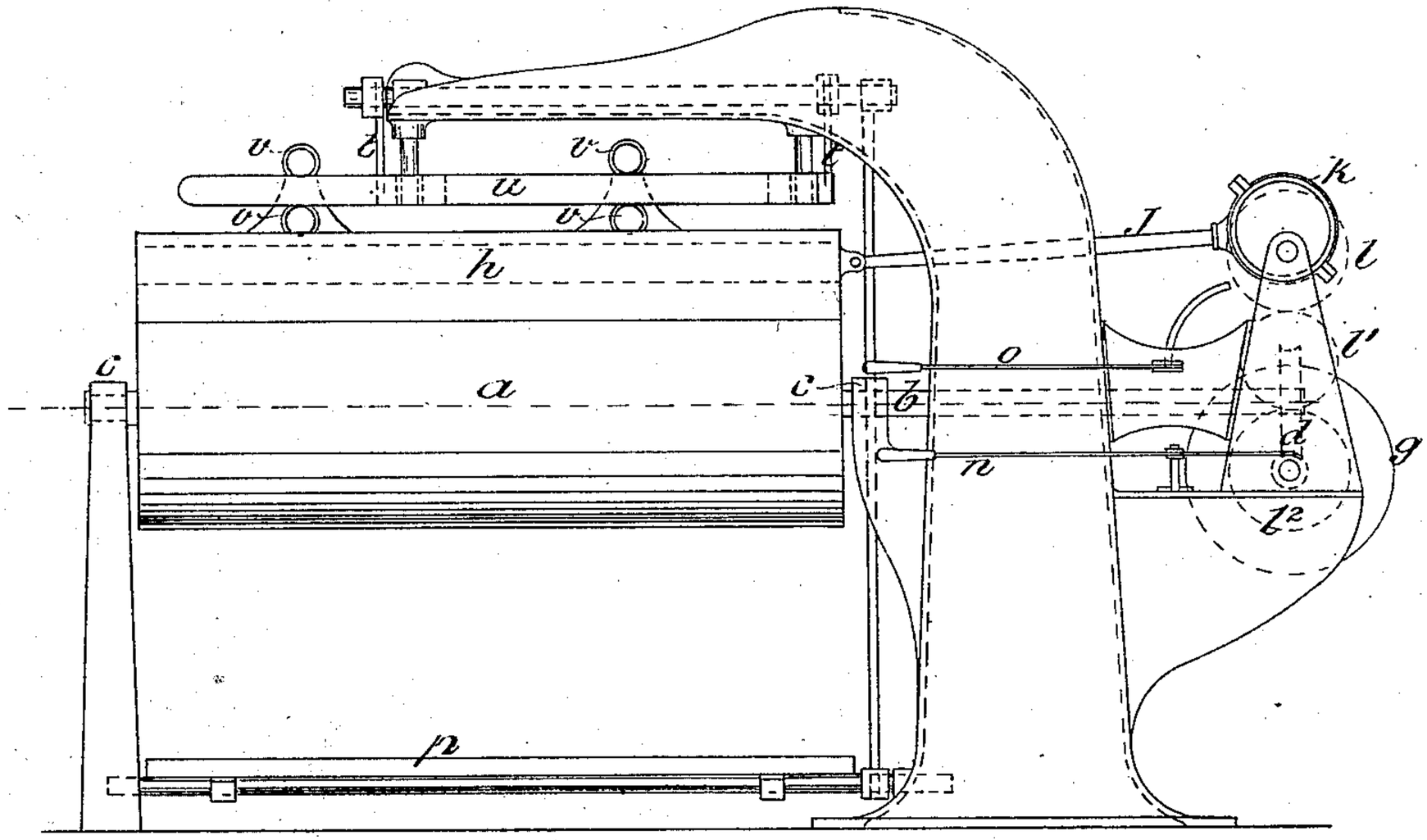




Fig 1

Witnesses
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Inventors.
William H. Davey.
Henry and Fabian.
by John J. Halsted & Son. their Attys.

(No Model.) 2 Sheets—Sheet 2.

# W. H. DAVEY & H. FABIAN.

## IRONING MACHINE.

No. 291,035. Patented Jan. 1, 1884.

Fig. 8.

Fig. 5

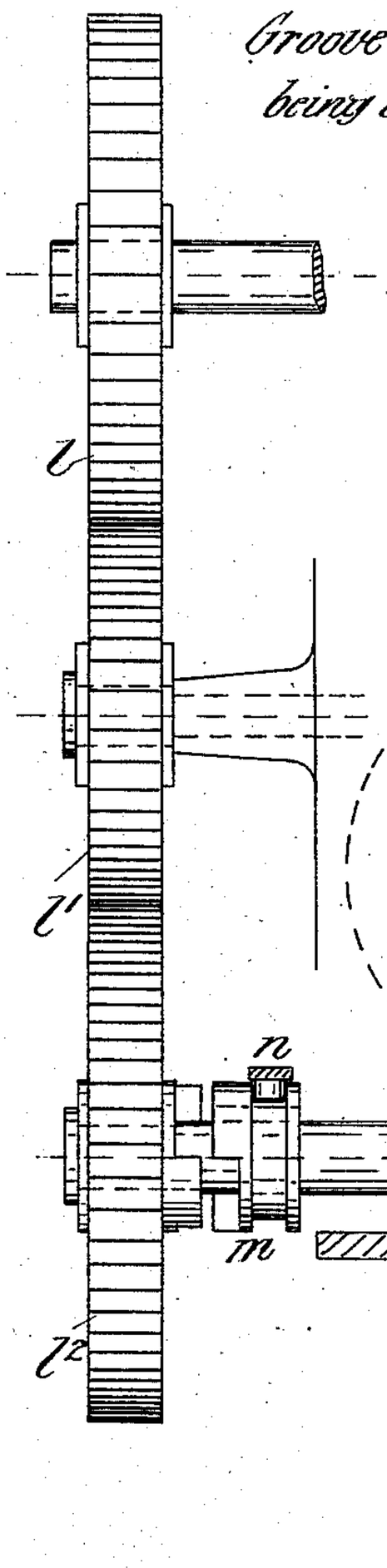
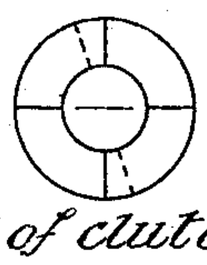
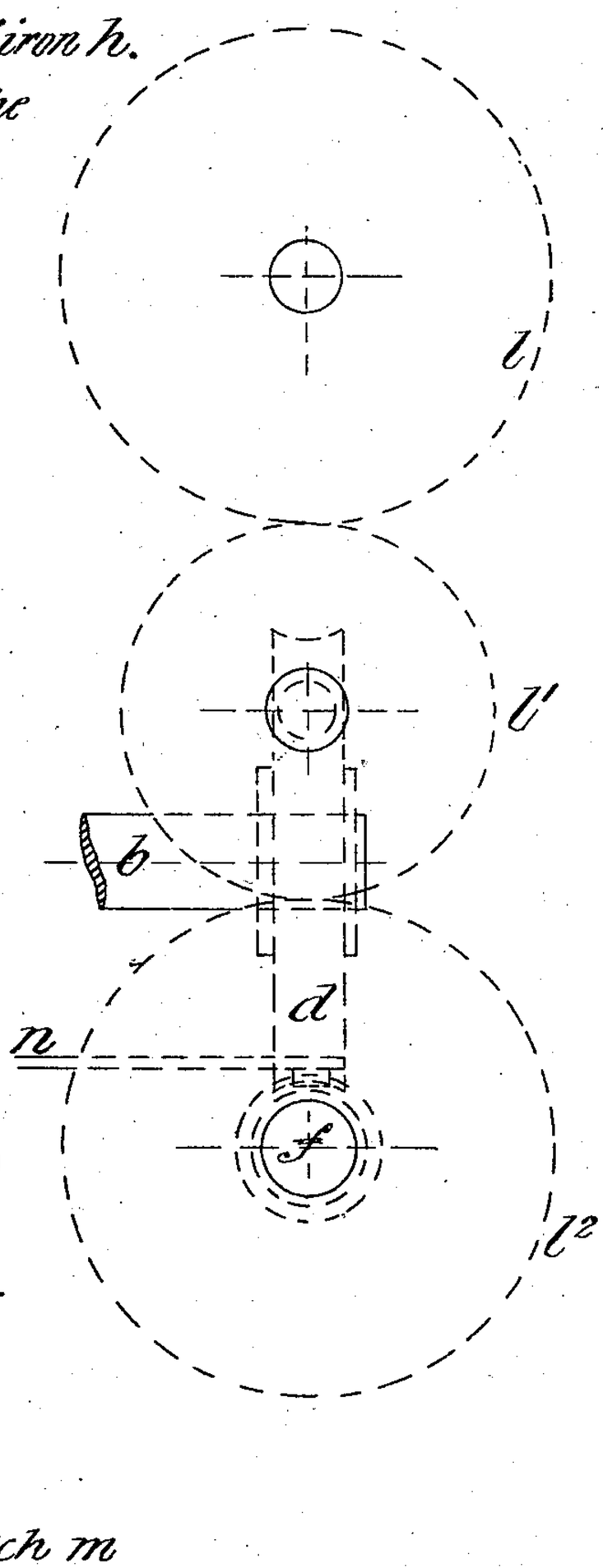



Fig. 7.



Groove or Grooves on face of iron h. being at any angle with the axis of roller a.

Fig. 6




face of clutch m

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# UNITED STATES PATENT OFFICE.

WILLIAM H. DAVEY AND HENRY FABIAN, OF LONDON, ENGLAND.

## IRONING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 291,025, dated January 1, 1884.

Application filed January 30, 1883. (No model.) Patented in England May 20, 1881, No. 2,208; in France January 25, 1883, No. 153,320, and in Germany January 28, 1883, No. 23,361.

*To all whom it may concern:*

Be it known that we, WILLIAM HOOK DAVEY and HENRY FABIAN, subjects of the Queen of Great Britain, residing at London, England, have invented new and useful Improvements in Ironing-Machines, (for which we have obtained a patent in Great Britain, No. 2,208, dated May 20, 1881,) of which the following is a specification.

This invention relates to the construction of an improved ironing apparatus for laundry purposes, also applicable for finishing or hot-pressing woven fabrics.

In carrying out our invention we employ a revolving cylinder, either made of wood or any suitable material, having a covering of soft fabric on which we apply the material to be ironed, finished, or hot-pressed. To this cylinder we adapt an iron or a metal ironing-bed, hollowed on the under side to suit the cylinder, and heated by steam, gas, or charcoal, or otherwise, to be moved forward and backward in the direction of the length of the cylinder; or the iron or ironing-bed may remain stationary when the cylinder revolves. When so desired, we also heat the revolving cylinder as well as the iron. The iron and the cylinder each receive their motion through suitable gearing, and may either be actuated simultaneously or separately. To the iron we apply pressure, when so desired, either by a foot-treadle or other means, and in order to bring up the beads or cords of collars or cuffs we may form a suitable groove or suitable grooves on the under surface of the glossing-iron to suit the beads or cords of various-shaped collars or cuffs. We drive the machine either by hand or by power, and an arrangement by which we can vary the stroke of the iron as well as its position on the cylinder may be provided. As a safeguard against the scorching of the ironing-fabric on the cylinder when the iron is resting the iron is arranged to lift off the cylinder, in which case a frame is provided as a temporary support for the iron.

In order to enable our invention to be better understood, we will proceed to describe the same by reference to the accompanying drawings, in which—

Figure 1 shows a front elevation of a machine constructed according to our invention. Fig. 2 shows an end view of the same, looking onto the gearing. Fig. 3 shows a section of the frame provided for the temporary support of the iron. Fig. 4 is a front elevation, showing the guide-rollers and part of the frame. Figs. 5 and 6 are detached enlarged views of the gearing for driving the machine. Fig. 7 is a view of the face of the clutch; and Fig. 8 is an enlarged view, section, showing the groove or grooves in the face of the iron.

Similar letters in all the figures represent similar parts.

*a* is the revolving cylinder, fixed on a shaft, *b*, turning in the bearings *c c*. The shaft *b* has at one end the worm-wheel *d*, which is driven by the worm *e* on the worm-shaft *f*, driven by the fast and loose pulleys *g*, or it may be driven by hand.

*h* is the iron or metal ironing-bed, the under surface of which is hollowed to correspond with the cylinder *a*. To the said iron or ironing-bed is jointed the rod *j*, carrying the eccentric *k*, the said eccentric being driven by the toothed gearing *l l' l²* from the worm-shaft *f*, whereby a reciprocating motion is imparted to the iron *h* backward and forward along the cylinder *a*. When it is not required to impart a reciprocating motion to the iron the clutch *m* is put out of gear by its lever *n*, and the iron will then remain stationary while the cylinder revolves.

*o* is the striking-lever for the driving-strap. The necessary pressure is obtained by the weight of the iron, and to relieve the pressure when required, we provide the treadle *p*, connected by the levers *q*, *r*, *s*, and *t* to the rising and falling frame *u*. The said frame is for carrying the iron when the pressure is relieved and for guiding the same by means of the rollers *v v v v* on the iron. The iron instead of being placed on the top of the cylinder, as hereinbefore described, may be placed in any other suitable position thereon. In some cases, more particularly for gas-heated machines, the treadle is employed for pressing the iron against the cylinder, in which case the iron, by any suitable arrangement is made to lift automatically when the treadle is relieved from pressure.

It will be evident that, where required, the stroke of the iron may be varied by any suitable arrangement of gearing.

We do not claim a reciprocating iron nor a revolving cylinder; but

We claim—

1. The combination of a revolving cylinder, a curved ironing-bed, *h*, connecting and operating mechanism, substantially as described, the worm *e*, worm-shaft *f*, worm-wheel *d*, shaft *b* of the cylinder, the clutch *m* on said shaft *d*, and its actuating-lever for said clutch, as and for the purpose specified.

2. In combination with the cylinder *a*, ironing-bed *h*, and the described means for actuating them and for arresting the motion of the bed, as desired, the treadle *p*, its connections *q*, *r*, *s*, and *t*, and the rising and falling frame *u*, the combination being and operating as and for the purposes set forth.

W. H. DAVEY.
HENRY FABIAN.

Witnesses:
G. F. REDFERN,
A. ALBUTT.