

No. 612,548.

Patented Oct. 18, 1898.

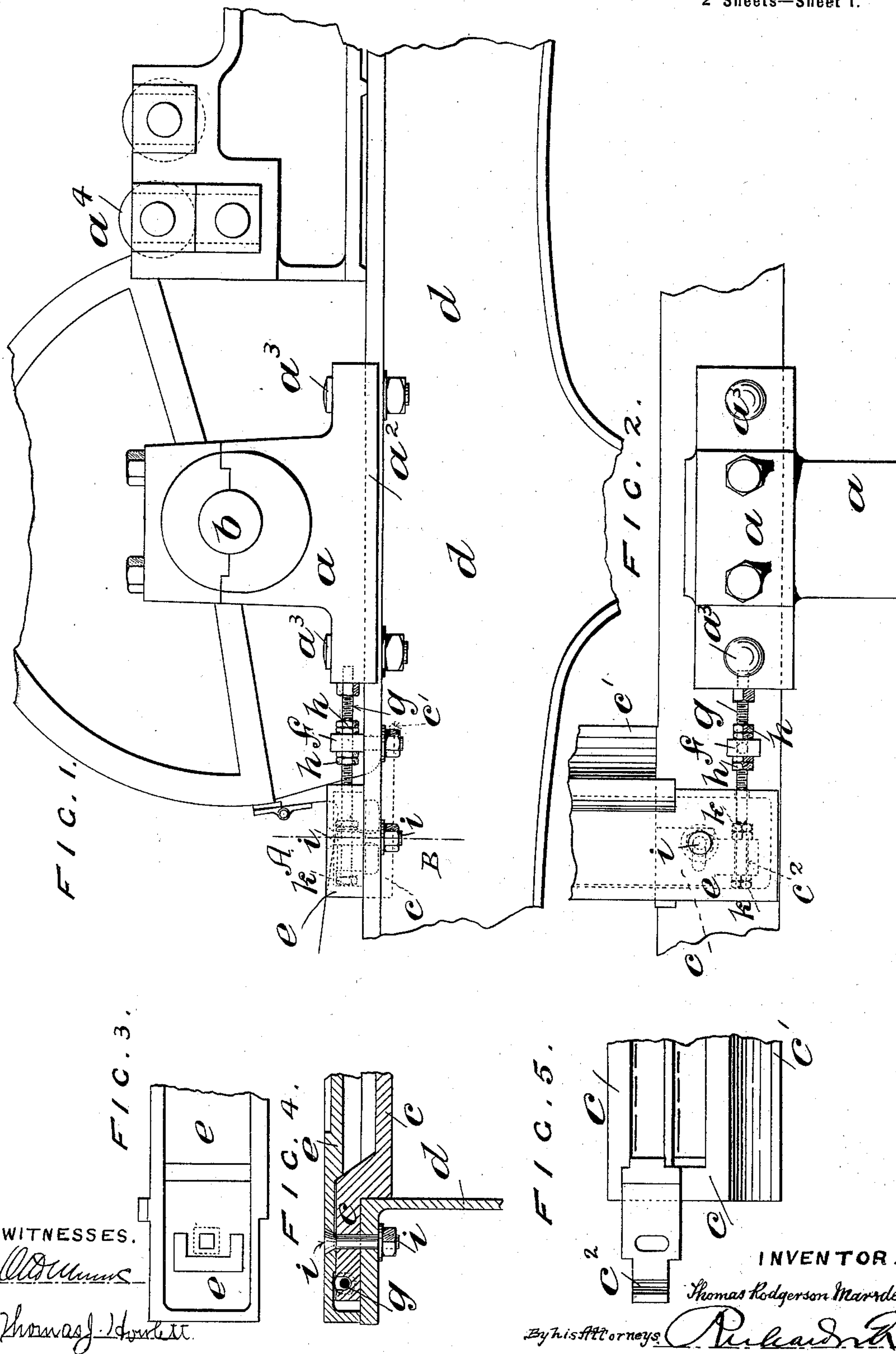
T. R. MARSDEN.

BEATER MACHINE FOR OPENING TEXTILE MATERIALS.

(Application filed Sept. 28, 1897.)

(No Model.)

2 Sheets—Sheet 1.



WITNESSES.

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INVENTOR.

Thomas Hodgerson Marsden.

By his Attorneys

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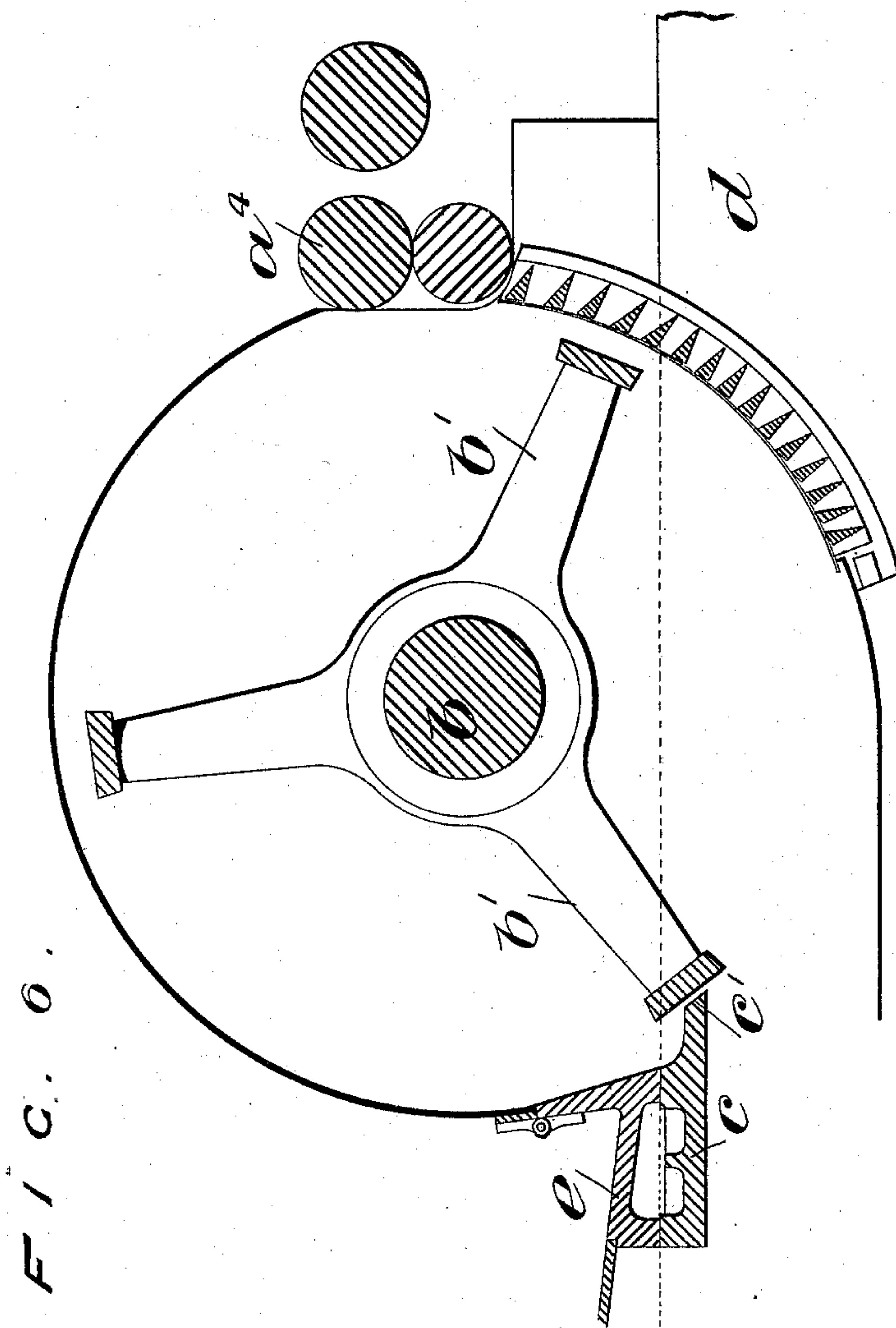
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2 Sheets—Sheet 2.



WITNESSES.

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UNITED STATES PATENT OFFICE.

THOMAS RODGERSON MARSDEN, OF OLDHAM, ENGLAND.

BEATER-MACHINE FOR OPENING TEXTILE MATERIALS.

SPECIFICATION forming part of Letters Patent No. 612,548, dated October 18, 1898.

Application filed September 28, 1897. Serial No. 653,393. (No model.) Patented in England December 6, 1892, No. 22,337.

To all whom it may concern:

Be it known that I, THOMAS RODGERSON MARSDEN, a subject of the Queen of Great Britain and Ireland, residing at Bank View, Derker street, Oldham, in the county of Lancaster, England, have invented a certain new and useful Improvement in Beater-Machines for Cleaning and Opening Textile Materials, (for which I have obtained a patent in Great Britain, No. 22,337, dated December 6, 1892,) of which the following is a specification.

My invention relates principally to the machines used in the cleaning and opening of cotton—as, for example, to the machines of the scutcher class. In such machines the cotton is fed forward by means of rollers and is acted upon by a rapidly-revolving beater while being held by the feeding mechanism, usually consisting of a pair of rollers, as is well understood. For some qualities of cotton it is advisable that the beater shall beat the cotton closely up to the nip of the rollers, while for other qualities less close action is desirable. It would thus be advisable to mount the feed-rollers so that they could be adjusted nearer to or farther from the beater axis; but this cannot be conveniently accomplished as the machines are now constructed. I effect the adjustment by moving the beater-shaft pedestals or bearing-blocks. The beater in its revolution just clears the edge of a stripping-rail which carries parts of the casing and is a fixture. As the machine has been hitherto constructed, the movement of the beater-pedestals would bring the beater in contact with the said stripping-rail or would too greatly increase the clearance between the beater and such rail. To overcome this difficulty, I form the stripping edge upon a rail or plate which is in a separate piece from the part which carries portions of the casing, as aforesaid, and I connect this rail with the beater-shaft pedestals, so that the parts move together when the beater is adjusted or otherwise stated. I form the ordinary rail in two parts—a stripping-rail and a bearer—and arrange for the separate adjustment of the stripping-rail.

In order that the nature of my invention may be clearly explained, I will refer to the accompanying two sheets of drawings, which

represent such parts of a scutching-machine as are necessary to the sufficient illustration of my invention.

On Sheet 1, Figure 1 is a side elevation of one of the beater-pedestals, showing the connection of the pedestal with the end of the rail upon which the stripping edge is formed together with the feed-rollers. Fig. 2 is a plan view of the pedestal and parts. Fig. 3 is an inverted plan view of a part of the bearer. Fig. 4 is a cross-sectional view on the line A B and shows the relative positions of the stripping-rail and bearer. Fig. 5 is a plan view of a portion of the stripping-rail. On Sheet 2, Fig. 6 is a sectional view of the beater-arms, stripping-rail, and feed-rollers.

Referring to the drawings, *a* is the beater-shaft pedestal. *b* is the beater-shaft. *c* is one end of the movable stripping-rail, and *d* is part of the underframing of the machine.

In Figs. 4 and 6, *c* is the stripping-rail, and *e* is the bearer, which extends across the machine and carries parts of the casing.

The pedestal *a* is mounted to slide in a straight line upon the planed top of the underframing *d*, and in the example is guided by a downwardly-projecting lip *a*². A filboe or abutment-piece *f* is fixed to the top of the framing, and through an eye in this filboe a screw *g* passes and by one end is attached to the pedestal. The other end of the screw passes through a groove *c*² in the end of the stripping-rail *c*. The said screw is provided with lock-nuts at *h h* upon the two sides of the filboe. It will be seen that the pedestal can be slid upon the top of the underframing after slackening the ordinary holding-down bolts *a*³ by turning these nuts in one direction or the other, as may be required, the pedestal being thus adjusted so that the beater will work closer up to the feed-rollers *a*⁴ or farther from them, as may be desirable. When adjusted, the nuts are tightened, so as to lock the screw in position, and the pedestal is further secured by tightening the holding-down bolts *a*³. It will be understood that provision must be made for the sliding of these bolts during the adjustment of the pedestal, or the bolt-holes in the pedestal-feet may be slotted.

The cranked end of the stripping-rail *c* is seated upon the top of the underframing *d*,

and the end of the bearer *e* is formed with a cavity or recess, so as to inclose the said cranked rail end, as clearly shown in Fig. 4.

It will be understood that there is a construction corresponding in all respects on each side of the machine.

The meeting faces of the two parts *c* and *e* are planed, so that they can be firmly clamped together by means of a bolt *i*, which passes through the two parts and through the ledge of the underframing *d*.

When the bolts *i* are slackened, the rail *c* is free to slide upon the underframing while the bearer *e* remains at rest. The screw *g* is provided with a second set of lock-nuts *k k* on each side of the rail end *c*. These nuts are only acted upon when it is desirable to adjust the stripping edge *c'* with relation to the beater. When the beater is to be adjusted with relation to the feed-rollers, the pedestal-holding-down bolts and the bolt *i* are slackened. The position of the two pedestals on the two side frames is then adjusted by means of the nuts *h h*, the connecting-screw *g* causing the rail *c* to move with the

pedestals, so that the relation of the rail with the beater-arms *b'* is maintained. When the adjustment is effected, the nuts *h h* and the holding-down bolts *i* are tightened.

I claim as my invention—

In combination in a beating-machine, the feed-rollers, the beater, the stripping-rail, the frame, the filboe *f* supported on the frame between the stripping-rail and beater-supports, the bolts *g, g*, connecting the stripping-rail with the beater-supports and extending on each side of the filboe, the nuts *h, h*, for adjusting the beater and stripper-rail relatively to the feed-rollers, the nuts *k, k*, also on the bolts *g* for adjusting the stripper relatively to the beater, the bearer under which the stripper is arranged and the bolts *i* passing through the bearer and stripper, substantially as described.

In witness whereof I have hereunto set my hand in presence of two witnesses.

THOMAS RODGERSON MARSDEN.

Witnesses:

JOSHUA ENTWISLE,
RICHARD IBBERSON.