No. 839,807. PATENTED JAN. 1, 1907.

W. BATTENSBY.

MITERING MACHINE.

APPLICATION FILED MAR. 28, 1906.

2 SHEETS—SHEET 1.

FIG. 1.

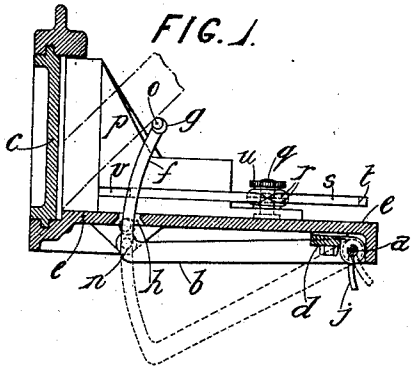


FIG. 2.

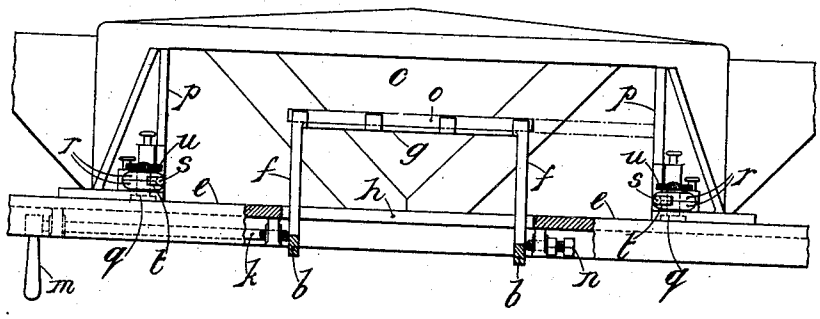
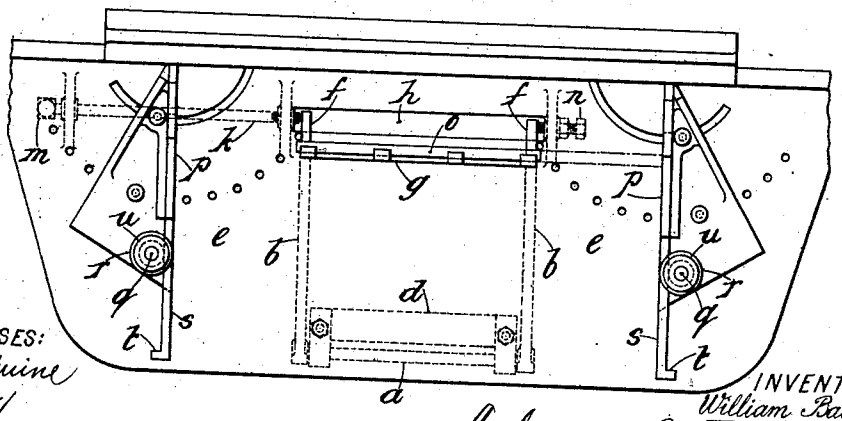


FIG. 3.



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2 SHEETS—SHEET 2.

FIG. 4.

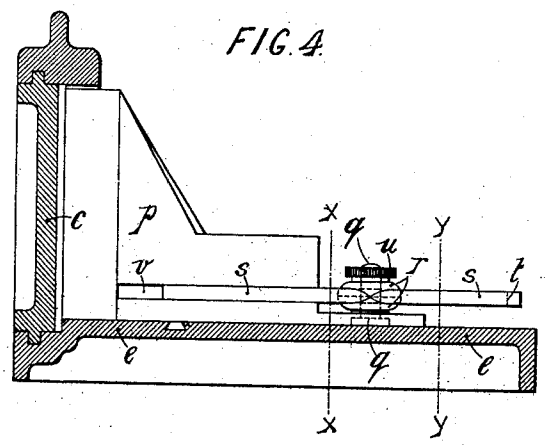


FIG. 5.

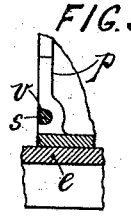


FIG. 6.

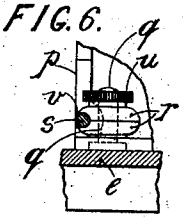
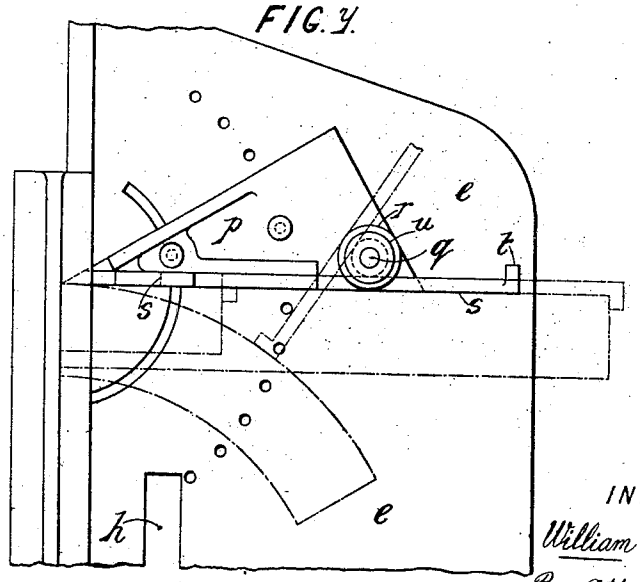


FIG. 7.



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WILLIAM BATTENSBY, OF GATESHEAD, ENGLAND.

MITERING-MACHINE.

No. 839,807. Specification of Letters Patent. Patented Jan. 1, 1907.

Application filed March 28, 1906. Serial No. 308,593.

To all whom it may concern:

Be it known that I, WILLIAM BATTENSBY, a subject of the King of Great Britain and Ireland, and a resident of Gateshead, in the county of Durham, England, have invented certain new and useful Improvements in or Relating to Wood Trimming or Mitering Machines, of which the following is a specification.

This invention relates to wood trimming or mitering machines.

At present in wood trimming or mitering machines it is customary when cutting compound or varying angles or bevels or mitering work too great in breadth or depth to be operated on in the usual way to employ separate attachments of various heights or sizes which are temporarily fixed or fitted to the table of the machine in the necessary position to support the work at the required angle, and it is generally usual to provide an adjustable stop device adapted to be temporarily fixed or fitted to the table in various positions to act as a gage or stop when successively operating on a number of similar pieces of work and in conjunction with one of the lateral gages as a support for work having curved faces, such as segments of a circle.

The object of this invention is to obviate the use of the separate attachments aforesaid when cutting compound or varying angles or bevels or mitering work too large to be operated on in the ordinary way and to arrange said adjustable stop devices so that they will be more efficient in use than at present.

According to this invention I provide the machine with a permanently-attached gage arranged parallel to the path of the cutters and adapted to be raised and lowered through a slot or the like in the table and to be adjusted to and locked in the required position by suitable means, and I arrange on each of the usual lateral gages an adjustable stop device comprising a rod which normally lies in a recess or groove in the working face of the gage out of the way and is adapted to be withdrawn when required and turned and clamped in any position in a horizontal plane to act as a gage or stop.

I will fully describe my invention with reference to the accompanying drawings, wherein—

Figure 1 is a cross-section of a wood trimming or mitering machine fitted with one form of my improvements. Fig. 2 is an end view of Fig. 1, partly in section; and Fig. 3 is a plan of Fig. 2. Fig. 4 is an enlarged part cross-section. Figs. 5 and 6 are part sections on the lines X X and Y Y therein, respectively; and Fig. 7 is a plan of Fig. 4.

Referring to the drawings, according to this form of my invention I mount on a pivot or pivots *a* a pair of arms or levers *b b*, arranged at a suitable distance apart and extending toward the cutter-carriage *c*, said pivot or pivots *a* being arranged parallel to the path of the cutters and carried by a bracket *d*, bolted below the table *e* of the machine or otherwise suitably and at or about the edge remote from the cutter-carriage *c*. The free ends of the arms or levers *b b* are provided with curved arms or extensions *f f*, connected together to form a gage *g*, arranged parallel to the path of the cutters, and in the table *e*, I provide a slot *h*, so that said curved arms or extensions *f f* and gage *g* may be raised and lowered therethrough into and out of operative position above and below the table *e*. A suitable handle *j* may be provided for raising and lowering the gage *g* to the desired position, or a spring, normally tending to keep the gage *g* in its extreme raised position, may be employed, the gage *g* being adapted to be lowered or depressed against the action of said spring. The gage *g* may be locked in the desired position by a screwed rod *k*, operated by a handle *m* and adapted to bear against one of the curved arms or extensions *b* and press or jam the other against an adjustable set-screw or stop *n* or by other suitable means. The gage *g* is preferably provided with a sliding rest-bar *o*, adapted to be slid up to the coöperating usual lateral gage *p* to adequately support the work. When not in use, the gage *g* is depressed or lowered below the table *e* and there locked, as shown in dotted lines in Fig. 1.

In operation, the gage *g* is released and raised to the required extent and then locked in position and the sliding rest-bar *o* slid up to the coöperating lateral gage *p*, as shown in dot-and-dash lines in Figs. 2 and 3, and the work is placed in position, as indicated by dot-and-dash lines in Fig. 1. The curved arms or extensions *b b* aforesaid may be provided with a scale or scales to facilitate the setting of the gage *g*.

On each of the usual lateral gages *p p* is mounted, as shown best in Figs. 4, 5, and 6, a vertical bolt *q*, having its head recessed into

the base of the gage p, and on the bolt q, I arrange a pair of washers or the like r r, between which a rod s, having a head t at one end, is clamped by a thumb-nut or the like u. Normally the rod s lies in a groove or recess v in the working face of the gage p and is turned so that its head t does not project beyond same. When the rod s is released and withdrawn from the recess v in the gage p, it can be adjusted and clamped in any position in a horizontal plane to act as a gage, stop, or support when successively operating on a number of similar pieces of work or when operating on work having curved faces. Three positions of the rod s are shown in dot-and-dash lines in Fig 7. By thus disposing and arranging the stop devices they are more handy in use and there is no danger of their getting lost.

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

1. In a wood trimmer or mitering machine having a frame and a cutter-path in said frame, the combination of a table on said frame, a gage arranged parallel to the cutter-path, a slot in said table, said gage being adapted to be raised and lowered through said slot, and means for adjusting and for locking said gage in the required position.

2. In a wood trimmer or mitering machine having a frame and a cutter-path in said frame, the combination of a table on said frame, arms pivoted to said frame and adapted to be rocked, a gage mounted on said arms and arranged parallel to the cutter-path, a slot in said table, said gage being adapted to be raised and lowered through said slot, and means for adjusting and for locking said gage in the required position.

3. In a wood trimmer or mitering machine having a frame and a cutter-path in said frame, the combination of a table on said frame, arms pivoted to said frame and adapted to be rocked, a gage comprising a sliding rest-bar mounted on said arms and arranged parallel to the cutter-path, a slot in said table, said gage being adapted to be raised and lowered through said slot, and means for adjusting and for locking said gage in the required position.

4. In a wood trimmer or mitering machine having a frame and a cutter-path in said frame, the combination of a table on said frame, arms pivoted to said frame and adapted to be rocked, a gage mounted on said arms and arranged parallel to the cutter-path, a slot in said table, said gage being adapted to be raised and lowered through said slot, means for adjusting and for locking said gage in the required position, lateral gages disposed on said table, recesses in said lateral gages, rods disposed in said recesses, projections on said rods, and means for clamping said rods.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

WILLIAM BATTENSBY.

Witnesses:
EDMUND WARD PATTISON.
HERBERT HOWARD.