

945,373.

Fig. 1.

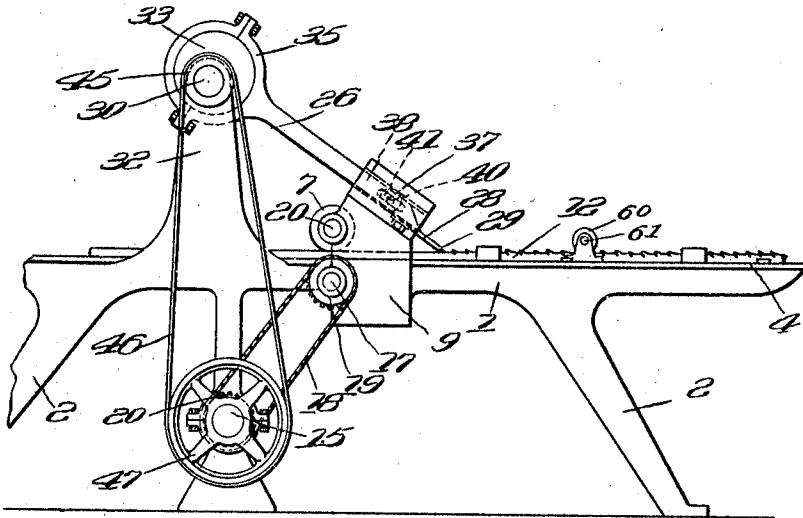
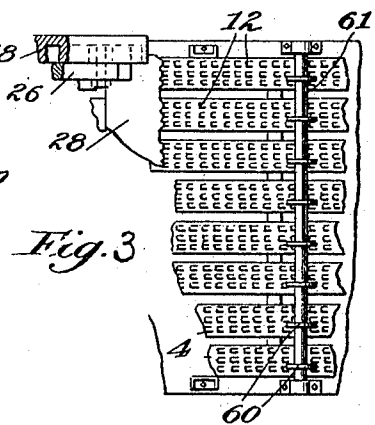
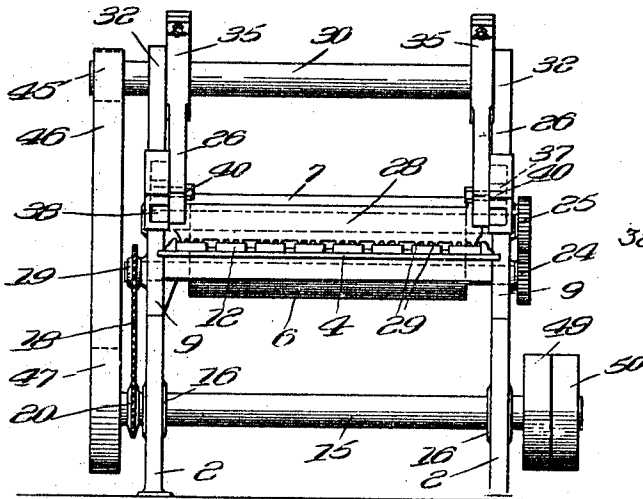


Fig. 2.



J. M. Melloward
H. L. Breckin

INVENTOR
William E. Brock
 BY
Alfred Wilkin
 ATTORNEY

UNITED STATES PATENT OFFICE.

WILLIAM E. BROCK, OF NORTH PLAINFIELD, NEW JERSEY.

WOODWORKING MACHINERY.

945,373.

Specification of Letters Patent.

Patented Jan. 4, 1910.

Application filed June 24, 1908. Serial No. 440,159.

To all whom it may concern:

Be it known that I, WILLIAM E. BROCK, a citizen of the United States, residing at 15 Mountain avenue, North Plainfield, in the county of Somerset and State of New Jersey, have invented new and useful Improvements in Woodworking Machinery, of which the following is a specification.

My invention relates to the roughening, or picking of wooden strips used, or to be used, in lath sections for the covering of walls in buildings, whereby a surface is produced on the strips to which the plaster, or other composition, firmly adheres, and consists in a machine of simple construction and mode of operation, for doing the work rapidly.

A desirable form of machine embodying my invention is illustrated in the accompanying drawing in which the reference numerals of the description indicate corresponding parts in the different views of which—

Figures 1 and 2 illustrate a preferable form of my invention respectively in side and front elevation. Fig. 3 is a plan of the sectional rotating roller.

My invention is here shown particularly adapted to the preparation of lath to be used in the manufacture of building material or wall covering of the character described and shown in a former application of mine for U. S. Letters Patent, in which the lath is secured together in sections. The machine consists of the standard 1 having supporting legs 2—2, upon which is arranged work supporting table 4. The work, which may be the aforementioned assembled lath sections, is placed upon the table 4 in position to be advanced through the machine by the feed rollers 6—7, desirably arranged as shown. These rollers are journaled by their shafts in side bearings 9—9, the lower roller 6 being arranged in an opening 10 in the work table to engage the lower surface of the lath sections 12 and to cooperate with the upper roller 7 to advance the lath by frictional engagement therewith.

The rollers are here shown operated from the drive shaft 15 journaled in suitable bearings 16 and connected to the lower roller shaft 17 by a sprocket chain 18 carried on a roller sprocket 19 and on a drive-shaft sprocket 20. Motion is communicated from the lower roller shaft 17 to the upper feed roller shaft 20 by the engagement of the

pinions 24—25, on the respective lower and upper roller shafts.

I have shown the preferred form of roughing tool, in which there are arranged above the table the reciprocating tool holders 26 oppositely arranged and carrying in their lower ends a suitable cutting blade 28 provided with cutting teeth 29 suitably spaced and operating upon reciprocation of the tool to pick and roughen the lath and then to withdraw. The tool-holders are here shown operated from the eccentric-shaft 30, suitably journaled above the table in the uprights 32, carrying eccentrics 33 to which are fitted the eccentric-straps 35 of the tool-holders.

Carried in the forward end of the tool holders are pivot-rollers 37 fitted to operate in slideways 38 formed in the side bearings or brackets 9, whereby an elliptical movement will be produced at the forward end of the tool which is desirable for the complete withdrawal of the teeth to give clearance for the work. Provision is made for a slight adjustment of the pivot-rollers to vary the form and extent of the roughing, and to this end I have shown the roller-pins 40 arranged to be adjusted in slots 41 in the tool-holders.

The rollers 37, pivoted on their pins 40 are fitted to the slideways 38 and therefore can only reciprocate, but from this pivotal connection between the tool-holders 26 and their respective rollers, the tool holders are free to swing thereon—not being fitted to nor confined in the slideways. By this rotation of the eccentrics 33 in the straps 35 the tool-holders are reciprocated and at the same time their upper ends are swung and therefore a very slight reverse swing is imparted to the blade 28, which therefore describes an elliptical path.

45 is a pulley on the end of the shaft 30 connected by a belt 46 to be operated from a pulley 47 on the drive shaft 15.

49 and 50 are the usual fixed and loose pulleys for the power belt not shown.

A retaining roller 60, carried on the roller shaft 61, suitably journaled, may be arranged in front of the cutters to steady the laths and to hold them firmly upon the table. This roller is preferably sectional, with the disks forming the sections arranged out of alinement with the picking teeth, so that this roller does not flatten the picked up portions.

Having fully described my invention, what I claim is,—

1. In a machine for roughening strips of wood, adapted for wall covering purposes, the combination with a standard and a work table thereon, a pair of feed-rollers to move the work, means to operate the feed-rollers, parallel brackets on the standard extending above the table, an eccentric shaft journaled in the brackets above the table, eccentrics fixed on said shaft adjacent to each end of the shaft and within the brackets, shorter side-brackets on the table having inclined guide ways, a tool-holder on each side, eccentric straps on the upper ends of the tool holders fitting around the eccentrics, a blade with cutting teeth secured on the lower ends of the tool-holders, rollers on the outer faces of the tool-holders engaging in said guide-ways, means to rotate the eccentric shaft, and a sectional retaining roller journaled slightly above the table to engage with the roughened strips and hold them in place the sections of said retaining roller being arranged out of alinement with the teeth.

2. In a machine for roughening wood-strips connected together to form lath sections for wall covering, the combination with a suitable standard and a horizontal work-table thereon, of a pair of suitably journaled parallel feed-rollers, the lower roller being arranged in a cross-opening in the table and extending slightly above the table surface, the upper roller being journaled above the lower roller, and said rollers being spaced to receive the work between them and to engage therewith, meshing pinions on the respective roller shafts; an eccentric shaft journaled above the table, eccentrics on the shaft, side-brackets on the table formed with inclined guide-ways, tool holders, cutting blades having picking teeth on the lower ends of the tool holders, connections between the tool-holders at their upper ends and the eccentrics, roller pins on the tool holders, rollers on the pins arranged in the slide-ways, said roller pins being slightly adjustable in slots in the tool holders, a drive shaft, operative connections between the drive shaft and the eccentric shaft, and operative connections between the drive shaft and the shaft of one of the feed-rollers, substantially as described and shown.

3. In a machine for roughening wood strips, the combination with a standard and a work table thereon, of brackets provided with inclined guide-ways, tool-holders fitted to reciprocate in the guide-ways, cutting

teeth on the lower ends of the tool holders, means to move the strips along the table beneath the tool holders and means to reciprocate the tool holders in the guide-ways and simultaneously slightly to swing the teeth to bring the teeth into engagement with the strips as they are moved, each tooth being retained constantly in the same vertical plane.

4. In a machine for roughening wood strips, the combination with a standard and a work table thereon of means to move the strips along the table, a slide-way, a tool-holder, cutting teeth on the end of the tool-holder adjacent to the table, a roller journaled on the tool holder and fitted to the slide-way and means adapted to reciprocate the tool-holder and to swing its opposite end, said teeth being arranged to be forced into the surface of the strips by said movement.

5. In a machine for roughening wood strips, the combination with a work table suitably supported, of means to move the strips along the table, a shaft suitably journaled above the table, an eccentric on the shaft, an inclined slide-way arranged above the table and at a lower level than the eccentric, a tool-holder, a cutter secured on the lower end of the tool-holder and arranged to engage the strips as the tool-holder is moved, a roller journaled on the tool-holder and fitted to the slide-way, a strap on the upper end of the tool-holder fitted around the eccentric and means to rotate the shaft and the eccentric.

6. In a machine for roughening wood strips, the combination with a standard and a work table thereon, of feed rollers to move the strips, means to operate the feed rollers, a shaft journaled above the table, eccentrics on the shaft, side brackets provided with inclined slide-ways arranged on the table at a lower level than the eccentrics but not directly below the eccentrics, tool-holders, rollers journaled on the tool-holders and fitted to the respective slide-ways, a blade having cutting teeth secured on the lower ends of the tool-holders, straps on the upper ends of the respective tool holders fitted around the eccentrics, and means to rotate the shaft.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM E. BROCK.

Witnesses:

D. M. RUNYON,
F. R. HILL.