

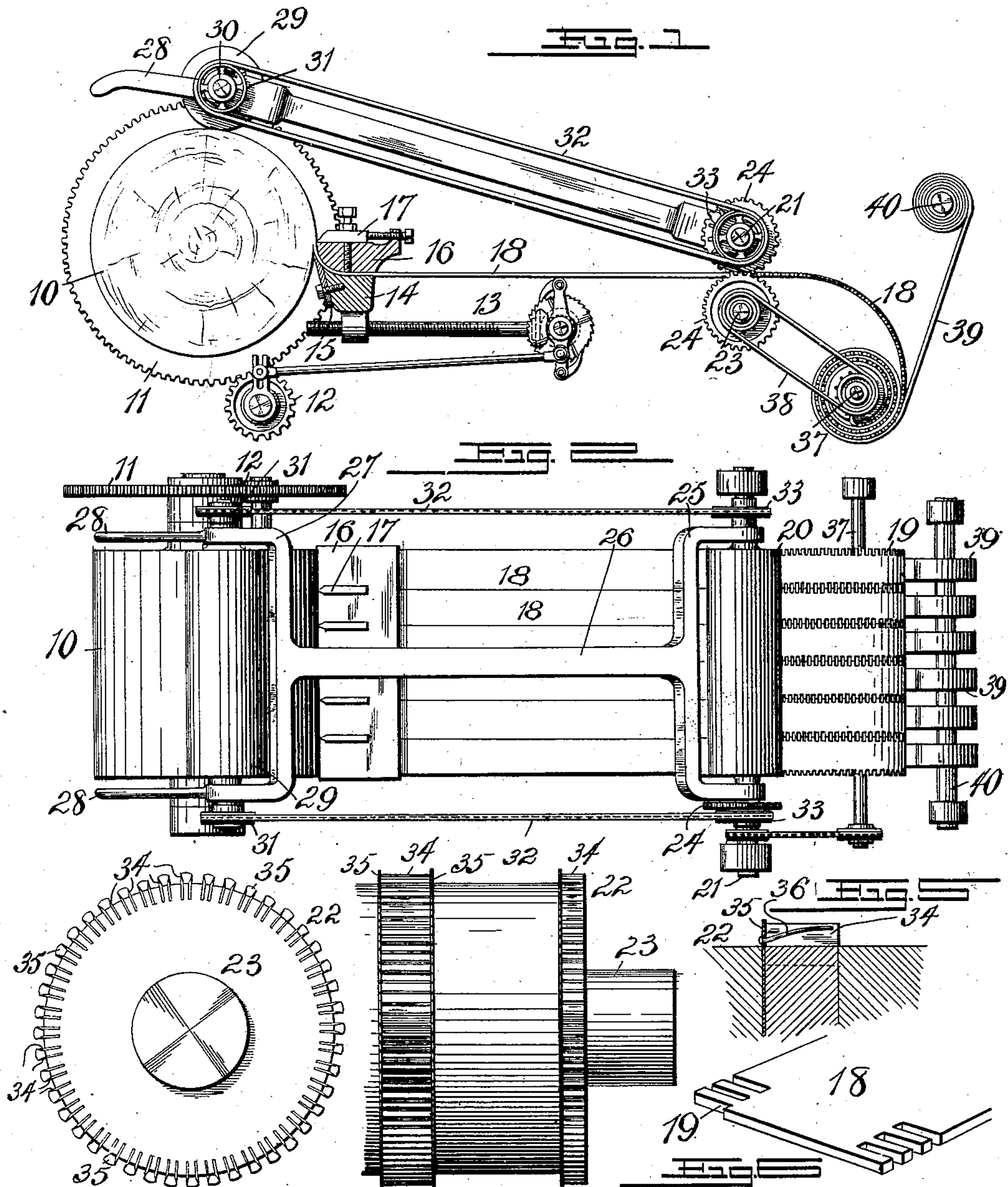
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W. H. PARKER.
APPARATUS FOR PREPARING MATCH STOCK.

APPLICATION FILED DEC. 29, 1902.

NO MODEL.



WITNESSES: 


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APPARATUS FOR PREPARING MATCH-STOCK.

SPECIFICATION forming part of Letters Patent No. 749,218, dated January 12, 1904.

Application filed December 29, 1902. Serial No. 136,937. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. PARKER, of Passaic, Passaic county, New Jersey, have invented certain new and useful Improve-
5 ments in Apparatus for Preparing Match-Stock, of which the following is a full, clear, and exact description.

My invention relates to improvements in a means for preparing match-stock, such as
10 veneers or similar materials, to fit them for making matches.

My invention is especially applicable to preparing stock for the processes illustrated in Letters Patent of the United States No.
15 703,453, dated July 1, 1902, and No. 704,091, dated July 8, 1902. In the processes referred to the strips of stock, which are of approximately the width of the match length, have their edges prepared for dipping in the sev-
20 eral compositions and are then either rolled up and dipped or dipped and then cut, as the case may be. It has been my practice heretofore to take the stock as it came out of the veneer-machine and then pass it through a
25 separate machine to prepare it for dipping and cutting; but I have found that by putting an attachment on an ordinary veneer-machine I can prepare the stock at the same time the veneer is turned, and thus eliminate one ma-
30 chine from the process, thereby cheapening to a certain extent the cost of the finished matches. My present invention has this end in view, and other objects of it are to produce an apparatus which can be conveniently ap-
35 plied to any ordinary veneer-machine and which would be driven from the log being turned. This latter is an important feature, as it is known that when a log is first started the velocity of the veneer when it is turned
40 from the log is much greater than it is after the log has been reduced in size, and by driving my apparatus from the log the speed is thereby always proportioned to the circumferential speed of the log and to the velocity
45 of the veneer as it leaves the log.

With these ends in view my invention consists of certain features of construction and combinations of parts which will be herein-
after described and claimed.

Reference is to be had to the accompanying 50 drawings, forming part of this specification, in which similar figures of reference refer to similar parts throughout the several views.

Figure 1 is a sectional elevation showing diagrammatically the main parts of one type 55 of veneer-machine with my apparatus connected therewith. Fig. 2 is a plan view of the apparatus. Fig. 3 is a much-enlarged detail of the rotary cutter which operates on the stock. Fig. 4 is a broken plan view of the
60 cutter. Fig. 5 is a detail sectional view showing a means of ejecting the chips from the cutter; and Fig. 6 is a detail view of the stock, showing its appearance after it is prepared.

In the drawings I have shown a log 10 as it 65 would appear in a common form of veneer-machine having any usual driving-wheel, and the machine is shown with the customary knife-feed, which has nothing to do with this invention and which comprises the gear 11, 70 the pinion 12, and the screw-and-ratchet feed 13, driven from the pinion 12 and advancing the knife-bar 14.

The machine is shown with a knife-bar 14, having a knife 15 the length of the log, and 75 above the knife-bar is the pressure-bar 16, carrying the spur-knives 17, which separate the veneer-sheet as it is turned into a series of strips 18, the width of which corresponds to the length of the match-splints. 80

I have shown the above mechanism only sufficiently to illustrate the use of my appa-
ratus, but with no idea of claiming it and with no intention of limiting my invention to the type of veneer-machine shown, as it can be 85 applied to any usual type of machine.

The veneer-stock 18 is notched on opposite edges, as shown at 19, this feature being illus-
trated in one of the patents referred to and forming no part of this invention. The ve- 90
neer-stock as it comes from the veneer-machine passes beneath a roller 20, preferably of rawhide, which is carried by a shaft 21 and between the said bearing-roller and the ro-
tary cutter 22, which is carried by the shaft 95
23. The two shafts 21 and 23 are connected by gears 24, so that both will turn oppositely and in unison, so that the stock may be fed

by the action of the cutter between the cutter and the bearing-roller 20. I have shown the shaft 21 supported in the forked end 25 of the frame 26, which at its other end is
 5 forked, as shown at 27, and provided with handles 28, by which it may be raised and swung on the shaft 21, the forked end 27 carrying also the shaft 30 of a driving-roller 29, which rides on the log 10. This roller or
 10 wheel 29 can be provided with spurs or roughened to give it a better hold on the log, if desired. The shaft 30 has a sprocket-wheel 31, connecting by a belt 32 with a sprocket-wheel 33 on the shaft 21, so that the shaft 21
 15 will be driven by the contact of the driving roller or wheel 29 with the log.

I have shown the shaft 21, carrying a form of rotary cutter 22, which has circumferential knives 24 parallel with the axis of the
 20 cutter, these knives being short and spaced the distance apart which corresponds to the width of a match-splint, so that they will notch the ends of the stock, as shown in Fig. 6. At the inner ends of the end rows of the
 25 knives 34 are short cross-knives 35, and in the middle rows of knives 34 the knives 35 appear at each end of the knives 34, because, as will be seen by reference to Fig. 2, the end knives on the cutter have merely to cut one
 30 edge of a strip, while the middle knives cut simultaneously the meeting edges of two strips.

As will be seen, the knives 34 cut transversely of the stock 18, while the knives 35
 35 cut parallel therewith and cut off the portions which are split by the knives 34, so as to leave the stock as shown at 19 in Fig. 6. The severed chips are likely to stick between the knives 34, and some form of ejector is necessary to throw out the chips. I do not limit
 40 myself to the use of any special ejector, but have springs 36 for this purpose, the springs being fastened between the knives 34, so as to spring upward and have a tendency to throw
 45 out the said chips.

It will be noticed that the speed of the cutter will always correspond to the speed of the stock 18 and that the several strips of stock will be simultaneously cut, and I have shown
 50 a simple form of rotary cutter without intending to limit the invention to this precise form of cutter.

When the stock leaves the cutter, it can be left straight, but it is preferably rolled up, as
 55 shown in the drawings and as illustrated in one of my former patents referred to, so as to prepare it for dipping. To this end the usual spindle 37 is provided for rolling up the stock 18, the spindle being driven by a belt
 60 38, connecting it with the shaft 33. When the stock is rolled up, a web 39 is rolled in with it to keep the edges of the stock sepa-

rated for dipping purposes, and I have shown the several webs as being unwound from the shaft 40. 65

I have not shown the means of supporting these several shafts in the drawings, because obviously they might be sustained in a bearing or framework, and, as above remarked, the invention lies chiefly in a rotary cutter operating on the stock, as described, and driven from the log which is being reduced. 70

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is— 75

1. The combination with a rotary veneer-machine, of a rotary cutter acting on the veneer-stock as it leaves the machine and operating to cut equidistant rectangular notches in the edges of the stock, and means for driving
 80 the cutter from the face of the log to maintain the ratio of travel between the stock and the cutter.

2. The combination with a rotary veneer-machine, of a rotary cutter acting on the veneer-stock as it leaves the machine and operating to cut rectangular notches in one edges of the stock, the notches on one edge coming opposite the projection formed by the notches on the opposed edge, and means for operating
 90 the cutter from the surface of the log in the machine.

3. The combination with a rotary veneer-machine, of a rotary cutter acting on the veneer-stock as it leaves the machine and operating to cut notches in the edges of the stock, the notches on one edge coming opposite the projection formed by the notches on the opposed edge, a set of gears operating the cutter, said gears being of the same size, a swinging frame supporting the gears and serving to hold a friction-wheel to engage the surface of the log in the machine, and means for operating the gears from the friction-wheel. 100

4. The combination with a rotary veneer-machine, of a rotary cutter arranged to cut transversely and longitudinally of the stock so as to form rectangular notches in the edges of the same, a vertically-swinging frame connected to the cutting mechanism and having
 110 its free end extending over the log, a friction-wheel carried by the frame and riding on the log, a set of gears journaled in the frame and operating the cutting mechanism, and means for operating the gears from the friction-wheel to maintain the speed of the cutters in relation to the travel of the stock. 115

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

WILLIAM H. PARKER.

In presence of—

W. B. HUTCHINSON,
 J. G. DUNBAR.