R. J. BROOKS, Jr.

Machine for Shaving Basket-Stuff.

No. 162,148. Patented April 20, 1875.

Fig. 1.

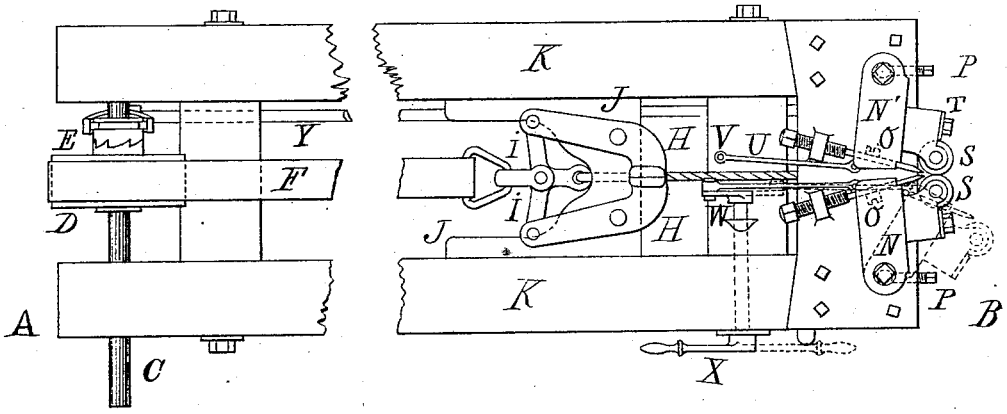


Fig. 2.

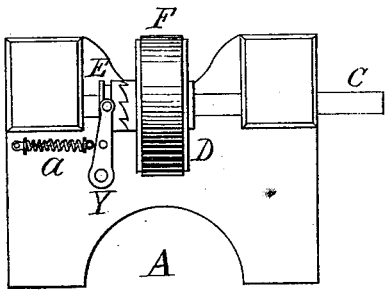


Fig. 3.

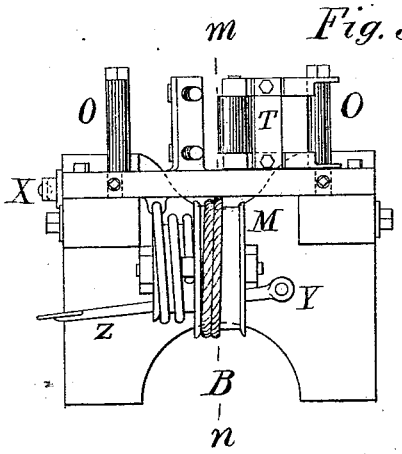
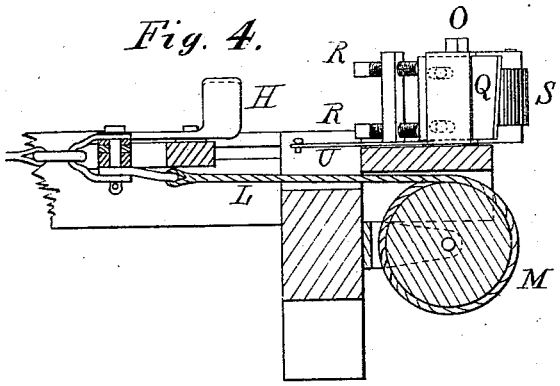


Fig. 4.



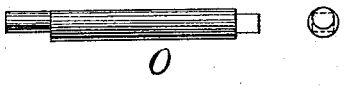
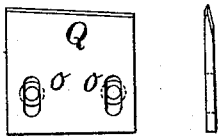


Fig. 5.



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UNITED STATES PATENT OFFICE.

REUBEN J. BROOKS, JR., OF RUTLAND, MASSACHUSETTS.

IMPROVEMENT IN MACHINES FOR SHAVING BASKET-STUFF.

Specification forming part of Letters Patent No. **162,148**, dated April 20, 1875; application filed December 11, 1874.

To all whom it may concern:

Be it known that I, REUBEN J. BROOKS, Jr., of Rutland, in the county of Worcester, State of Massachusetts, have invented an Improvement in Machines for Shaving Basket-Stuff, of which the following is a specification:

My invention relates more particularly to the finishing of that class of split basket-stock used in making large strong baskets, though applicable to many others.

It is designed to shave and smooth the sides of the pieces after they are split out, an operation which has heretofore been done with a knife by hand. My invention will shave and finish one or both sides at once, and at the same time reduce them to an even thickness, only requiring the attendant to insert the end of a piece, and press down a treadle to start it, and the machine automatically draws the piece through, smoothing and finishing it, and the carriage and jaws are returned to place ready for another piece.

Its nature consists in the use of one or more adjustable shaving mechanisms, consisting mainly of a knife and guide-roll or guard, and a drawing mechanism, consisting of a pair of nippers or holder to grasp the piece, and a belt or connection to a drum or pulley through which power is applied, and a spring attachment or weight to return the holder to place ready to repeat the operation.

The accompanying drawings represent a machine embodying my invention.

Figure 1 shows a plan or view, from above, of the operating parts, the middle of the frame being removed. Fig. 2 is a view of the end A of Fig. 1. Fig. 3 is a view of the end B, with one knife-holder removed. Fig. 4 is a section of Fig. 3 through the line *m n*, as seen from the left; and Fig. 5 shows the knife and eccentric stud on a larger scale.

The same letters indicate the same parts whenever they occur.

C is the driving-shaft, to which power is applied. D is a drum or pulley, loose on C and driven by the clutch E, which is thrown into play by the rod Y and foot-lever Z, and has a spring, *a*, to release it. F is a belt or connection from the drum D to the jaws H H through the levers I I. The jaws H H are made to turn back or flare at the upper ends to facilitate the entrance of the work, and are supported by the carriage J, which slides in the frame K K. L is a rod or connection from the levers I I to the spring-drum M, which returns the carriage and jaws to place when the clutch E is released. N is the knife-holder, and is adjustable both by the stud O, which is set on an eccentric pivot, and has its end squared or fitted to turn it, and is held when set, and by the screw P, which gives the holder, with its knife Q and roll S, an adjustability to and from the piece operated on, and the screws R R, which receive the strain of the cut and adjust the inclination of the knife and its position. The knife Q is held in the holder by two screws O O, and has its edge sloping, as shown in Fig. 5, to make a drawing cut, and also to tend or guide the work from rising up. The elastic roll S is placed near the knife, and a little before it, being held in adjustable bearings on the holder N, and has a guard-plate, T, to prevent the shavings curling or flying around the roll to interfere with the work. This roll I prefer of rubber, that its elasticity may allow the rough parts of the piece to pass without affecting the action of the knife, and also to save friction. The holder N′, after being set or adjusted, is held in place by the connection U to the pin V, and the other, N, connected to the lever W, which is operated by the handle X, or a similar device, to allow the holder N to be turned a little away from the other, N′, to insert the work, and is returned to place by reversing the handle *x*, the broken lines showing their position when open, in Fig. 1. The frame K is made long enough to work the longest piece, if desired, or pieces can be shaved any length by allowing the carriage to return and take a new hold with the jaws H H.

The operation is as follows: The carriage, with the jaws open, is drawn up to the knives, and the attendant turns the handle X and opens the holder N; then, putting a piece with the end in the jaws, reverses X, and presses down the treadle Z, which closes the clutch E, and the drum D draws the piece through the knives, smoothing and finishing it, and when the end passes the knives the strain on the clutch E is removed, and the spring *a* opens it and releases the drum D,

and its belt and the spring M return the carriage with its jaws to place ready to repeat the operation. The screws R R adjust the pitch or inclination of the knife, and also set it opposite the knife or rest on the opposite side. When one side only is to be shaved a round edged knife or a rest may be used on the other, or a roll, and the knives Q Q might be made with a lip, if desired, to finish both edges of a strip, as well as the sides; and it is evident that more than one piece may be put in at once by making the jaws deep enough to hold them and draw them all through at once, and that a weight, or other device, might be used to return the carriage, as my invention is not in these special devices.

I do not claim any of the devices or mechanisms used in the patent No. 44,361, granted October 4, 1864.

What I claim as new, and desire to protect, is—

1. In a machine for shaving basket-stock, the adjustable shaving mechanism described, consisting of the knife Q, roll S, and their adjusting-holder N, substantially as above set forth.

2. The pivoted knife-holder N, in combination with the lever W and connection therewith, as above set forth.

3. The combination of the holder N, adjustable knife Q, elastic roll S, and the guard-plate T, when constructed and operating in the manner and for the purposes above set forth.

4. The combination of the shaving mechanism described, consisting of the knife Q and its holder N, and the drawing mechanism, consisting of the sliding jaws H H and the drum D, substantially as set forth.

5. The combination of the shaving mechanism, the drawing mechanism, and the returning mechanism, consisting of the spring-drum M and connection L, making the machine automatic, when constructed and operating substantially as above set forth.

In testimony whereof I hereto set my hand.

R. J. BROOKS, JR.

Witnesses:
J. GREENE,
D. SANDS.