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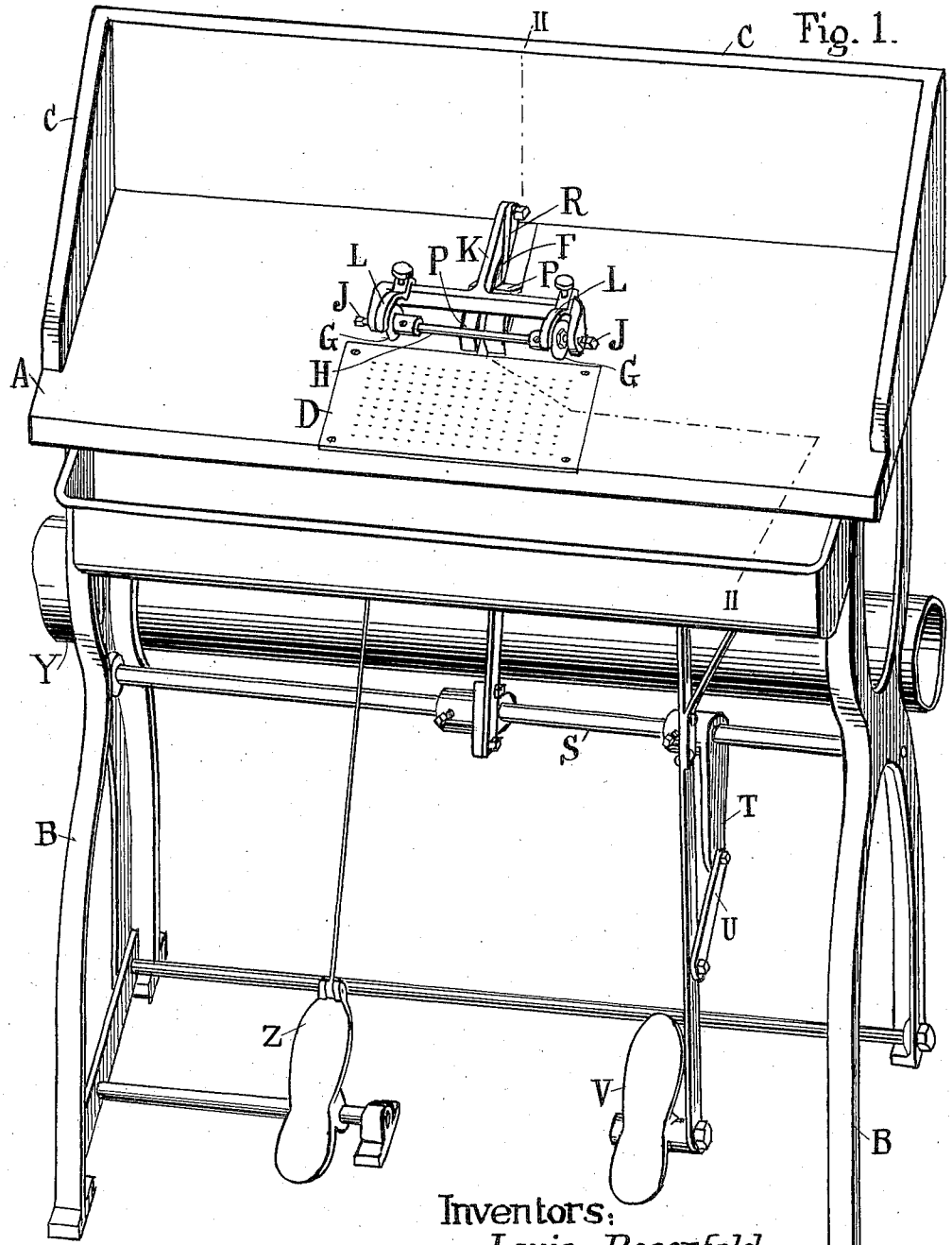
CIGAR BINDER CUTTING AND BUNCH MAKER'S TABLE.

APPLICATION FILED JULY 26, 1911.

1,032,506. Patented July 16, 1912.

2 SHEETS—SHEET 1.

Fig. 1.



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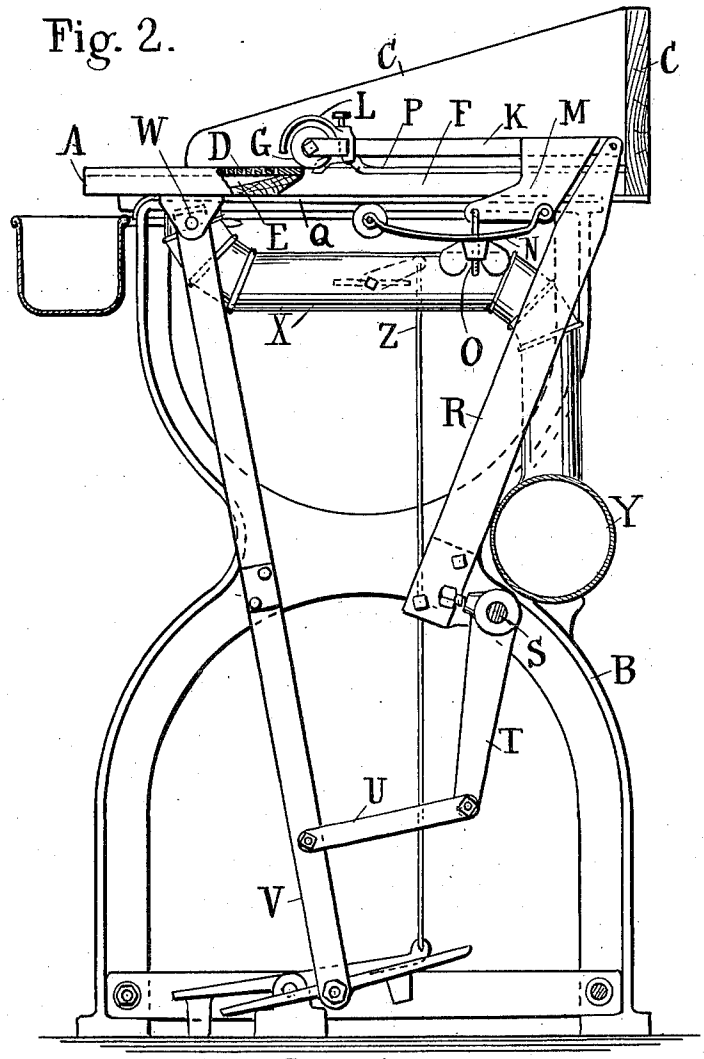
CIGAR BINDER CUTTING AND BUNCH MAKER'S TABLE.

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2 SHEETS—SHEET 2.

Fig. 2.



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CIGAR-BINDER-CUTTING AND BUNCH-MAKER'S TABLE.

1,032,506. Specification of Letters Patent. **Patented July 16, 1912.**

Application filed July 26, 1911. Serial No. 640,617.

To all whom it may concern:

Be it known that we, LOUIS ROSENFELD, ISAIAH C. ROSENTHAL, and FREDERICK FLEISCHMAN, all citizens of the United States of America, and residents of the borough of Manhattan, in the city of New York, county of New York, and State of New York, have invented certain new and useful Improvements in Cigar-Binder-Cutting and Bunch-Makers' Tables, of which the following is a specification.

In the systematic manufacture of the higher grades of cigars the operations of gathering and binding are performed at one table by one operative and the outside wrapper is put on by another operative at an adjoining table. The gathering and binding is performed with about twice the speed of careful wrapping and it is therefore customary to supply two wrappers' tables from a bunchmaker's table placed between them.

Our invention relates particularly to the construction of the bunchmaker's table, but we do not wish to be limited thereto as to features which may be applicable to a wrapper's table.

The object of this invention is to provide conveniently operated mechanism for cutting and economically utilizing the binder leaf in the binding of the filler for cigars, such mechanism to be connected with a table upon which a binder leaf may be laid flat, the filler gathered and laid upon the leaf and the binder leaf wrapped about the filler. To this end we have devised a cutting mechanism operating on a table with a perforated plate let into its top and having beneath it a suction chamber in communication with a suction pipe, the cutting mechanism being arranged so that when not in use it will leave the suction plate unencumbered for the convenient gathering of the filler and binding with the binder leaf.

In the accompanying two sheets of drawings which form a part of this application—Figure 1 is a perspective of a binder table constructed in accordance with our invention, and Fig. 2 is a vertical section from front to back through the table on the line II—II of Fig. 1.

The bunchmaker's table comprises a flat top A conveniently of wood, mounted on iron legs B B at either side. A curbing C C is at the back and sides of the table. Extending back from the middle of the forward edge and let in flush with the top of the table is a perforated plate D suitably of hard metal. Underneath the perforated portion of the plate the table is hollowed to form a suction chamber E. A slot F is cut through the table opposite the middle and extends from the rear edge of the perforated plate to the curbing at the rear. Circular knife blades G G are mounted on a shaft H which revolves on the ends of the screws J J in a carrier K. The blades are held in position on the shaft by set screws through their hubs and may be shifted to any desired spacing. Guards L L prevent the fingers of the operative from coming in accidental contact with the knives. The carrier normally rests at the rear of the perforated plate leaving the plate entirely free for spreading the binder leaf and wrapping it around the filler. A guide plate M projects downwardly from the carrier through the slot, so that the forward and back movement of the carrier is confined to the same line. A flat spring N fulcrums at one end against the bottom of the guide plate and at the other end carries rollers which bear against the underside of the table. The spring is put under tension by a screw O between it and the carrier in front of the carrier guide plate, and the knives are thereby caused to bear against the plate with the pressure necessary for cutting the binder leaf. As the point of application of this pressure lies between the two knives equalized pressure between them and the table is secured. Metal strips P P above the table and metal strips Q Q below the table confine the guide plate and protect the sides of the slot in the wooden table from wear. The upper strips are raised above the table near the forward ends and an incline formed thereon, upon which the carrier rests in its rearward position when the knives are off from the plate so that the knives will not cut into the wood of the table top. The under strips serve as tracks for the rollers on the end of the spring.

An arm R projects upwardly through the slot in the table and is jointed to the rear end of the carrier. This arm is carried by

a transverse shaft S which is journaled in the table legs. From the shaft is a depending arm T which is connected by a link U with a pendulum treadle V. The treadle is pivoted under the table top near the forward edge at W and is pushed rearwardly by the foot to operate the carrier and roll the knives forward over the perforated plate to cut the binder leaf. By reason of the forward location of the pivot point so that the knee of the operative will be beyond the line of the pendulum treadle, the treadle becomes a firm support on which the right foot can rest when the carrier and knives are at the rear of the table and the treadle is at the limit of its movement toward the operative. From the suction chamber a pipe X is led to the suction main Y and the suction is controlled by a valve mechanism Z with the operative's left foot.

In bunching and binding with this bunchmaker's table a binder leaf is laid upon the perforated plate and with the suction operating it is stretched upon the plate. The pendulum treadle is then operated to push the knives forward and cut the leaf to the length for which the knives are set. After the knives are back out of the way, the filler, after having been bunched in the hand, is laid upon the binder and the binder rolled around the filler by the operative. During this operation the suction continues to hold the unrolled parts of the binder so that it is well stretched during the binding.

While our invention has been described in conjunction with the cutting of the binder, the bunching of the filler and binding, we do not wish to be limited thereto, since we claim our invention for whatever use it may be applicable.

Modifications may be made in details of construction without departing from the spirit of our invention.

What we claim as new, and desire to secure by Letters Patent of the United States, is—

1. The combination of a table and a rotary member coöperating therewith, one of these elements being provided with a pair of knife blades, a carrier for the rotary member supported through the knife blades, means for applying equalized pressure between the knife blades and their opposed element, and mechanical means for imparting a forward and back motion to the carrier along the same line while the table and rotary member are in contact, whereby cutting is simultaneously effected along parallel lines, substantially as described.

2. The combination with a table, of a pair of circular knife blades coöperating with the table, a carrier for the knife blades supported through the knife blades, means for applying equalized pressure between the knife blades and the table, and mechanical means for imparting a forward and back motion to the carrier along the same line while the knife blades are in contact with the table, whereby cutting is simultaneously effected along parallel lines, substantially as described.

3. The combination with a table, of a pair of circular knife blades coöperating with the table, an arm mounted on a transverse shaft below the table and projecting above the table, a carrier for the knife blades hinged to the arm and supported through the knife blades, means for applying equalized pressure between the knife blades and the table, and means for imparting a forward and back motion to the carrier along the same line while the knife blades are in contact with the table, whereby cutting is simultaneously effected along parallel lines, substantially as described.

4. The combination with a table, of a pair of circular knife blades coöperating with the table, an arm mounted on a transverse shaft below the table and projecting above the table, a carrier for the knife blades hinged to the arm and supported through the knife blades, means for applying equalized pressure between the knife blades and the table, a treadle mounted to swing forward and back under the table, and connections between the treadle and arm whereby upon operation of the treadle the carrier will have a forward and back motion along the same line while the knife blades are in contact with the table, whereby cutting is simultaneously effected along parallel lines, substantially as described.

5. The combination with a hard perforated suction table, of a pair of circular knife blades coöperating with the table, a carrier for the knife blades supported through the knife blades, means for applying equalized pressure between the knife blades and the table, and mechanical means for imparting a forward and back motion to the carrier along the same line while the knife blades are in contact with the table, whereby cutting is simultaneously effected along parallel lines, substantially as described.

6. The combination with a table, of circular knife blades coöperating with the top of the table, a carrier for the knife blades, a roller bearing against the underside of the table, a spring connecting the roller with the carrier, and means for imparting a forward and back motion along the same line to the carrier while the knife blades are in contact with the table, substantially as described.

7. The combination with a perforated suction table, of circular knife blades cooperating with the top of the table, an arm mounted on a transverse shaft below the

table and projecting above the table, a carrier for the knife blades hinged to the arm, a roller bearing against the underside of the table, a spring connecting the roller with the carrier, and means for imparting a forward and back motion to the carrier while the knife blades are in contact with the table, substantially as described.

Signed at New York, N. Y., this 25th day of July, 1911.

LOUIS ROSENFELD.
ISAIAH C. ROSENTHAL.
FREDERICK FLEISCHMAN.

Witnesses to all signatures:
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FRANK C. COLE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."