No. 875,071. PATENTED DEC. 31, 1907.

O. HAMMERSTEIN.

METHOD OF PRODUCING CIGAR BUNCH STRUCTURES.

APPLICATION FILED OCT. 29, 1902.

2 SHEETS—SHEET 1.

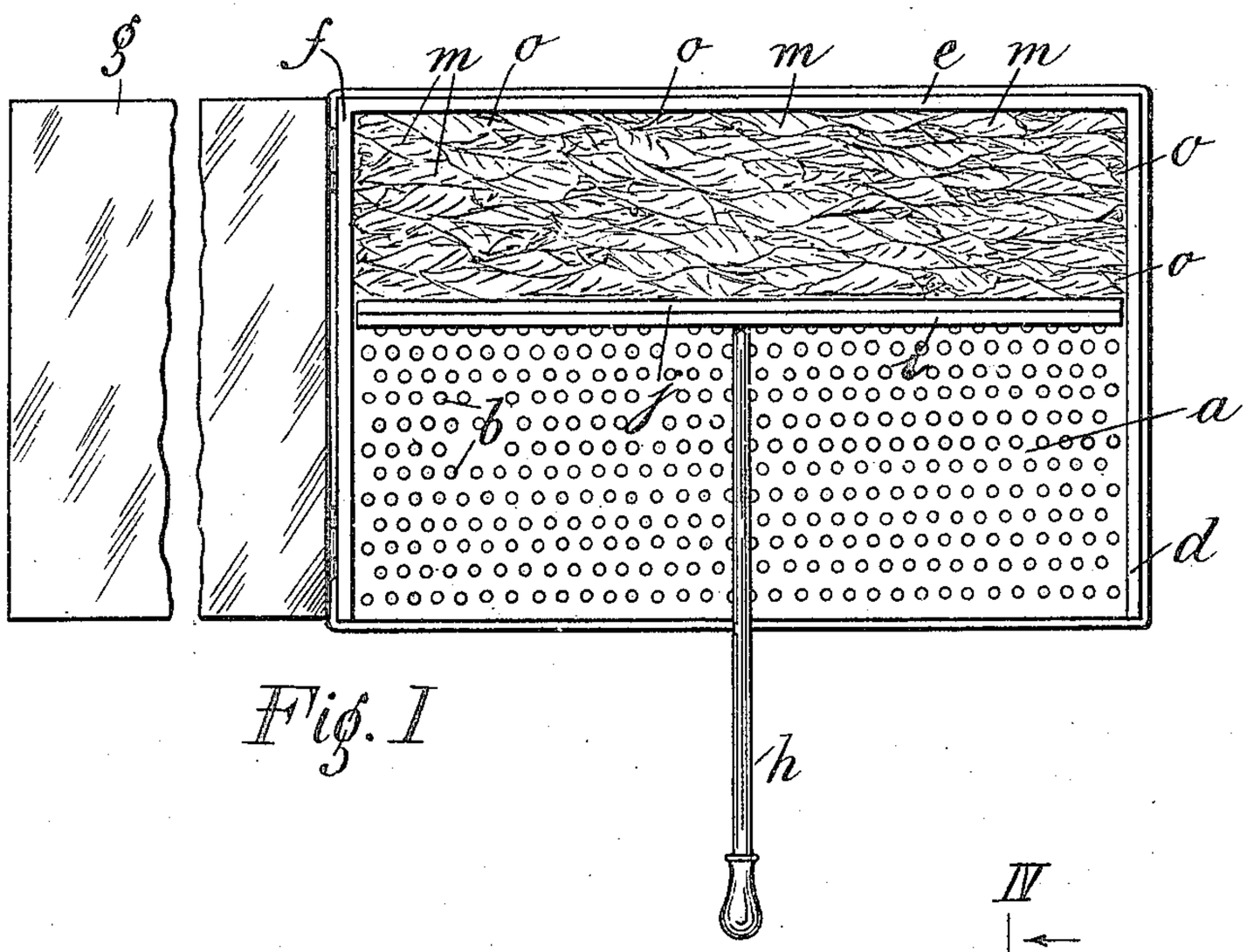

Fig. I

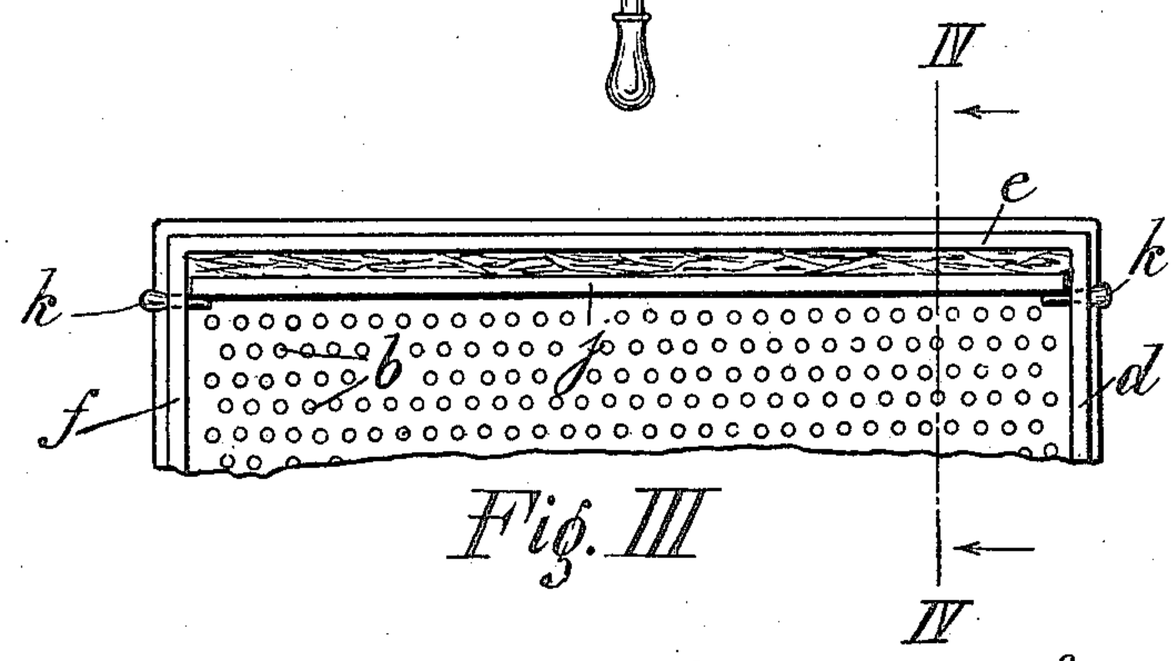

Fig. III

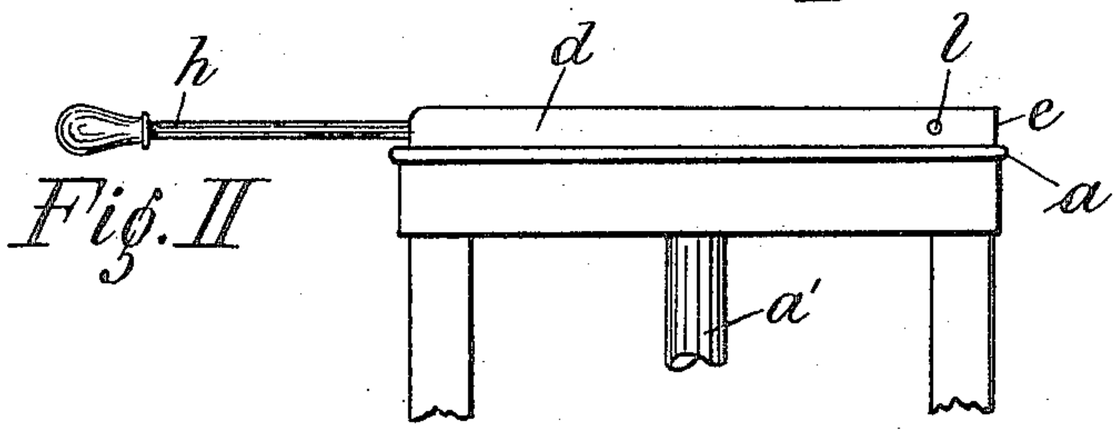

Fig. II

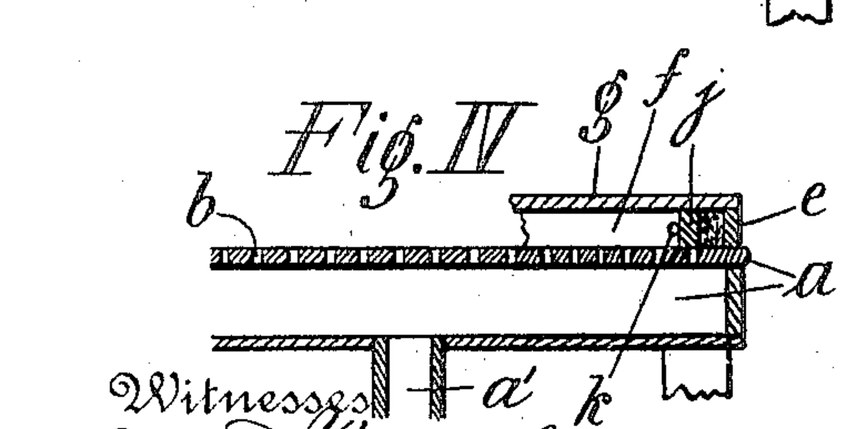

Fig. IV

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2 SHEETS—SHEET 2.

Fig. V

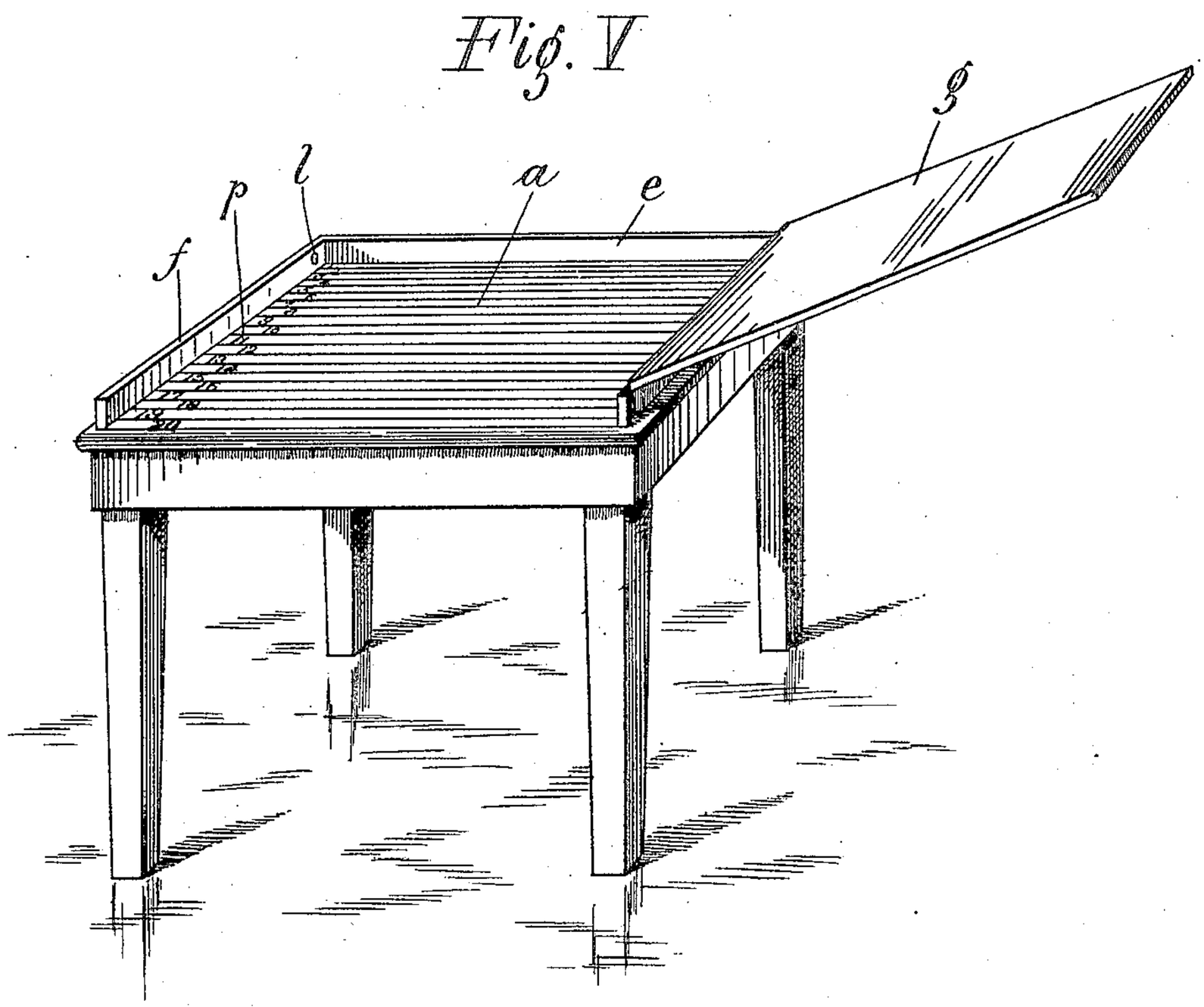
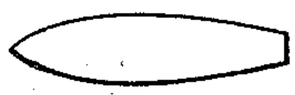


Fig. VI



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METHOD OF PRODUCING CIGAR-BUNCH STRUCTURES.

No. 875,071. Specification of Letters Patent. Patented Dec. 31, 1907.

Application filed October 29, 1902. Serial No. 129,200.

To all whom it may concern:

Be it known that I, OSCAR HAMMERSTEIN, a citizen of the United States, residing in the borough of Manhattan, city, county, and State of New York, have invented certain new and useful Improvements in Methods of Producing Cigar-Bunch Structures, of which the following is a specification.

My invention relates to method of producing cigar bunch structures.

In the accompanying drawing, I have shown diagrammatically for the most part one form of apparatus by which my invention may be practiced and will now proceed to describe the said apparatus and set forth one mode of employing the same in carrying out my invention.

In this drawing, Figure I is a plan view of the apparatus showing tobacco leaves spread out thereon; Fig. II is a side elevation thereof; Fig. III is a plan similar to Fig. I, showing the tobacco leaves compacted; and Fig. IV is a section on line IV—IV of Fig. III. Fig. V is a perspective view of the apparatus and Fig. VI is a view of an ordinary shoe die which may be employed.

One embodiment of the process when air suction is used may be briefly stated as follows: On a table which may be in the shape of a box with a perforated top and having means for exhausting the air therefrom, I form a sheet of leaf tobacco, joining the edges of each leaf (whether large or small) laterally to the adjacent ones. I do not place one leaf on top of the other, simply joining them as I have said into a layer. I do not herein use the term "join" in the limited sense of to fasten together but use it in its broadest sense. This sheet is confined preferably by three walls about one inch high with which coöperates a suitable movable cover. I then by means of a stick or plunger or follower or its equivalent placed laterally of the table push the tobacco leaves against one of the walls where it is confined between the table, cover, wall and stick to compact the same into a mass from which the bunches may be cut in any suitable manner.

In describing my process I would have it understood that I describe one definite continuous process by way of example and do not mean to limit myself specifically thereto but desire to include any process which under the limitations prescribed by the prior art may be equivalents thereof the essential feature being placing the leaves on a surface, support or table and compacting the tobacco laterally into a bunch structure.

In the drawing, *a* indicates a suitable table or support for the leaf tobacco. This support may either be solid or in the form of a box with its top perforated for the purposes of applying air suction. In Figs. I, II, III and IV, I have shown the table as perforated at *b* and with a suction pipe *a'*. The suction pipe *a'* is for the purpose of applying air suction when necessary. The table as shown is provided with raised edges or cleats *d*, *e*, *f*, between which as walls the tobacco is confined, the edges *d*, *f* also serving as guides for the sweep stick or plunger hereinafter referred to. The perforations cease at a line in advance of the wall *e* so that the portion of the table surface in the immediate neighborhood of the wall *e* is solid or imperforate. The table is also shown as provided with a cover *g* hinged in the present instance but not necessarily so as any cover which will serve the purpose of aiding in confining the tobacco may be used. The cleats or walls *d* and *f* are in this instance shown as provided with some means for securing a suitable movable stick or other device for aiding in confining the tobacco. In the present instance I have shown pins *k* entering suitable holes *l* in the cleats *d* and *f*. These pins secure the stick in place when it is in position to confine the tobacco. The pins and holes may be omitted, if desired. In Fig. V I have shown lines extending laterally of the table which lines are shown as drawn at regular distances apart to guide the operator in laying out the leaf tobacco. I have also shown a scale *p* for indicating to the operator the distance of any line from the wall *e*. This scale and the lines are omitted from Figs. I, II and III for the purposes of clearer illustration.

Co-acting with the parts just mentioned is a suitable sweep or plunger, a convenient form of which is shown in the drawings as consisting of a handle *h* provided with a cross-bar *i* and adapted to slide a movable device for compacting the tobacco, which, for the want of a better term, I shall call a sweep-stick *j*, by which I mean any device capable of pushing the tobacco over a surface coöperating with other surfaces or walls to confine the tobacco within a given space.

In carrying out my process I cover the desired surface of the table with leaf tobacco as follows:—I place upon the top surface of the table leaf tobacco *m*, and *o*. I do not place

one leaf upon another nor secure the leaves together. The character of this layer may be previously determined, depending upon the thickness or character of the bunch desired to be produced. The lines and scale shown in Fig. V aid in this operation as in order to produce certain thickness of bunches the operator is instructed to lay the tobacco on the table within a space, say twenty inches, from the cleat *e* and for another size, to lay the tobacco upon a space within twenty-five inches from the cleat *e*, the lines and scale enabling her to readily determine the space or the area to be covered. It will be understood that air suction may be applied through the agency of the pipe *a'*. When the tobacco has been thus laid, the sweep-stick *j* is laid at the edge of the sheet of tobacco as shown in Fig. I and the sweep or follower *i* placed behind it. The cover *g* is now closed down on the table and by a steady motion of the sweep in the direction of the arrow in Fig. I, the tobacco is compacted laterally and confined in a narrow space between the table *a*, the cleat *e*, the cover *g* and the sweep-stick *j* as clearly shown in Figs. III and IV. In order to confine this tobacco in place for the desired purpose, I provide pins *k* which pass through the aperture *l* in the cleats *d* and *f* behind the stick and serve to hold the same in position. When the desired amount of tobacco has been compacted, it may be cut into the length and shape for long filler bunches or otherwise as desired; as an instance of a means for cutting the same into bunches, I have shown in Fig. VI the outline of an ordinary shoe die.

Having described my invention, what I claim and desire to secure by Letters Patent is:

1. The herein described process of producing bunch structures which consists in forming a complete unbroken single sheet of leaf tobacco, joining the edges of each leaf laterally to the adjacent ones, so as to form a continuous unbroken sheet of a single thickness of leaf tobacco and then compacting the entire sheet of tobacco laterally by pressure into a bunch structure.

2. The herein described process of producing bunch structures which consists in forming a complete unbroken single sheet of leaf tobacco, joining the edges of each leaf laterally to the adjacent ones so as to form a continuous sheet of a single thickness of leaf tobacco and compacting the said tobacco laterally by mechanical pressure into a confined space.

3. The herein described process of producing bunch structures which consists in placing leaf tobacco with edges in contact upon a suitable support in an unbroken sheet of a single thickness of leaf tobacco, in the presence of air suction, and compacting the sheet of tobacco laterally into a bunch structure.

OSCAR HAMMERSTEIN.

Witnesses:

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