(No Model.) 2 Sheets—Sheet 1.

C. WILSON.

MEAT SLICING MACHINE.

No. 501,554. Patented July 18, 1893.

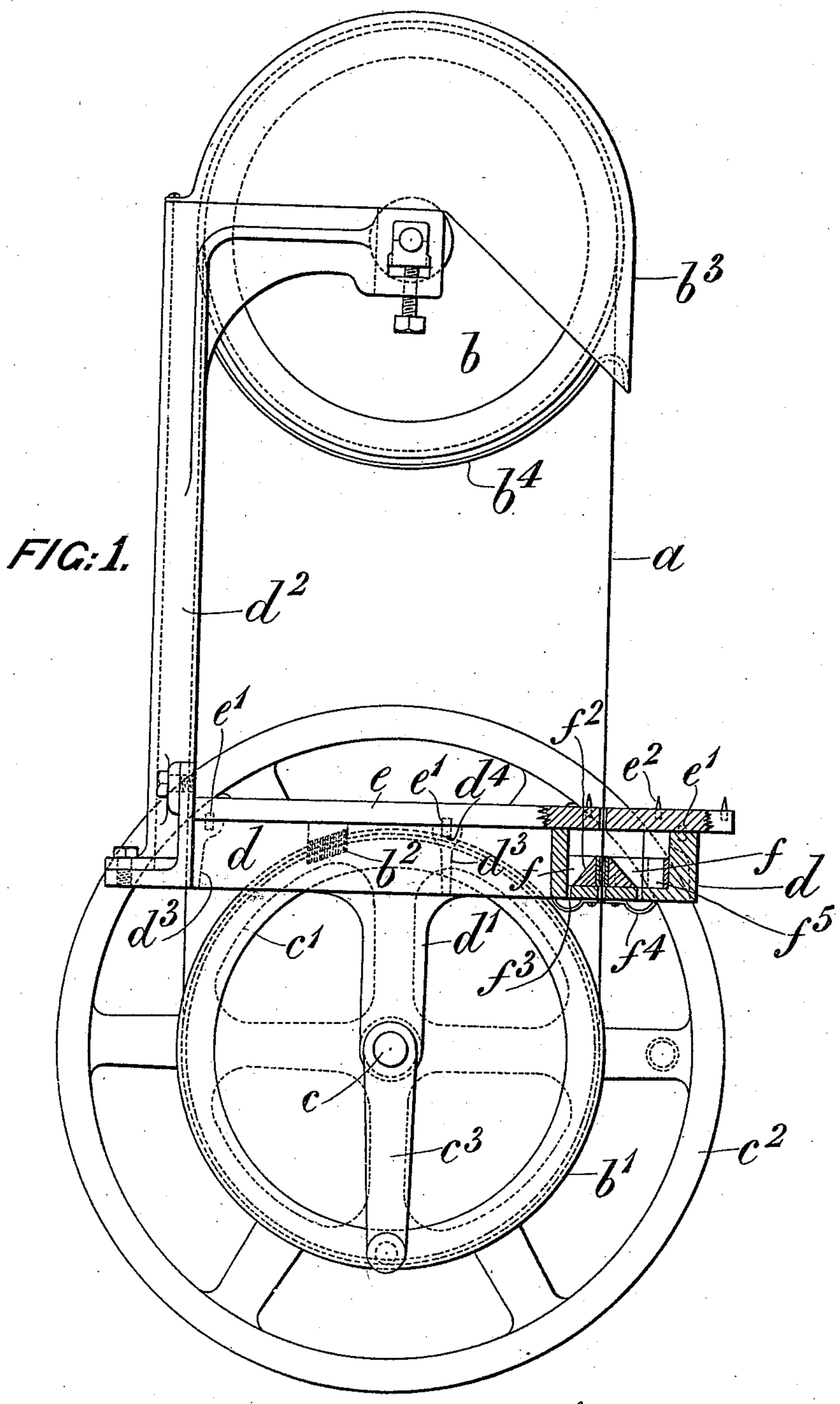

FIG: 1.

Witnesses
H. E. Shepard.
C. E. Hunt.

Charles Wilson
Inventor.
By John J. Halsted & Son
his Attorneys.

(No Model.) 2 Sheets—Sheet 2.

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FIG: 2.

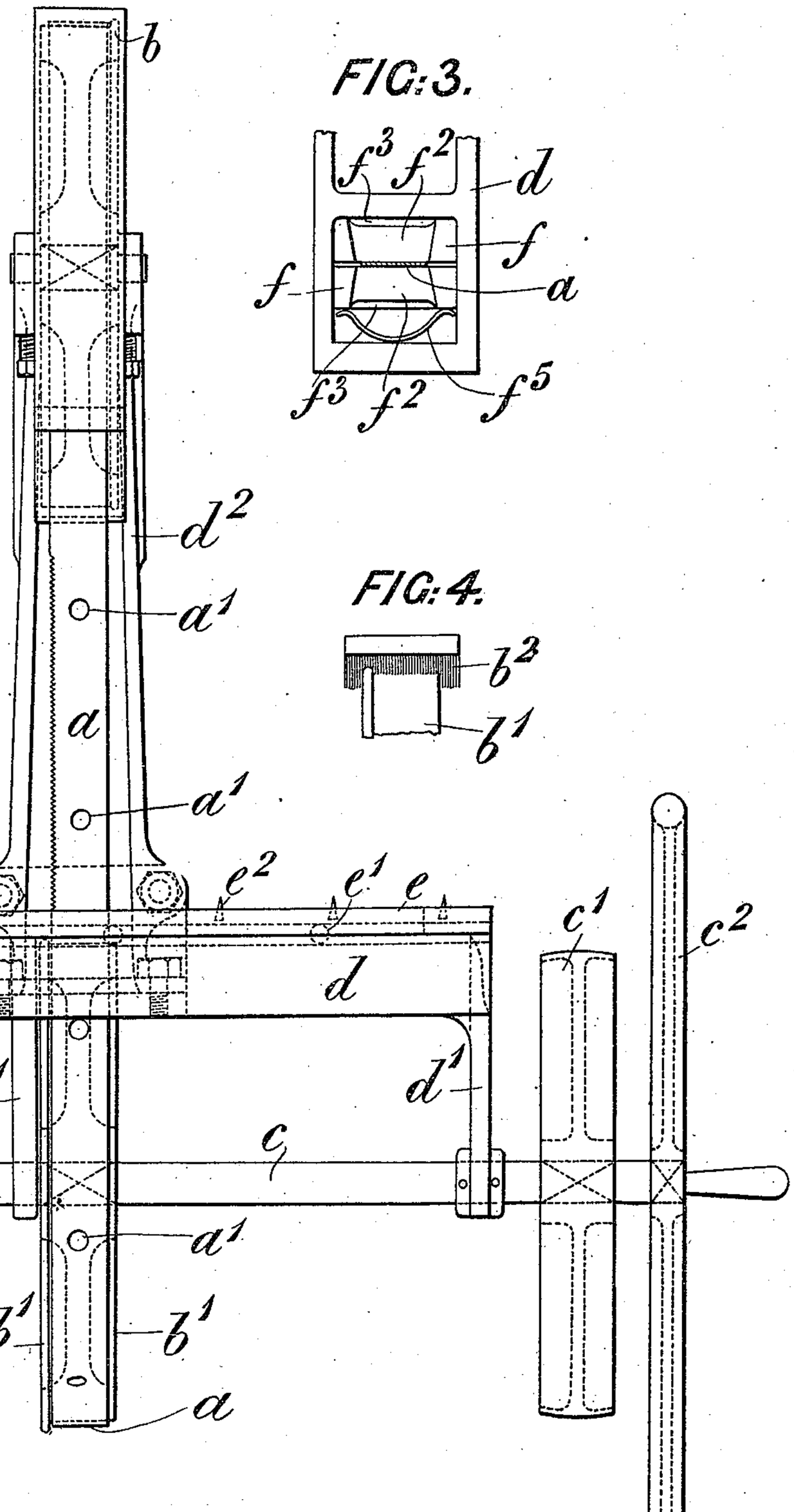

FIG: 3.

FIG: 4.

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UNITED STATES PATENT OFFICE.

CHARLES WILSON, OF NEWCASTLE-ON-TYNE, ENGLAND.

MEAT-SLICING MACHINE.

SPECIFICATION forming part of Letters Patent No. 501,554, dated July 18, 1893.

Application filed March 8, 1893. Serial No. 465,200. (No model.) Patented in England June 11, 1892, No. 10,993.

To all whom it may concern:

Be it known that I, CHARLES WILSON, a subject of the Queen of Great Britain, residing at 75 Elswick Street, Newcastle-on-Tyne, England, have invented a new and useful Meat-Slicing Machine, (for which I have obtained a patent in Great Britain, No. 10,993, bearing date June 11, 1892;) and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

The object of this invention is to facilitate the slicing of meat.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a front elevation of the machine, partly in section to show more clearly the apparatus for cleaning the grease from the saw. Fig. 2 is a side elevation looking on the right hand side of the machine. Fig. 3 is a detail view showing in plan the grease cleaner for the saw. Fig. 4 shows by side view part of the bottom sheave and the brush for cleaning the same.

The same letters of reference indicate like parts in the several figures.

a is a band saw which passes over two sheaves or pulleys *b* and *b'*, the bottom pulley *b'* being carried by the driving axis *c* upon which latter is fixed the driving pulley *c'*, the handwheel c^2 and the crank c^3. The two sheaves *b* and *b'* are carried in suitable bearings and supported by means of brackets d^2 and *d' d'* respectively, which are rigidly attached to a bedplate *d*. This bedplate, which is supported upon suitable framework, (not shown on the drawings) carries the sliding table *e*, and is provided with ribs d^3 having grooves d^4 in the upper parts thereof, in which grooves run a series of roller bearings *e'* in order to reduce the friction of the moving table *e*. This table *e* has, projecting from its upper surface, a number of spikes e^2 which help to keep the article steady when cutting thin slices. The sliding table *e* is also formed with a slot, (through which the saw passes) extending from front to rear, to allow the sliding motion to take place. In order to clean the saw of grease which would accumulate thereon and prevent the proper driving effect of the pulleys, I connect to the framework of the bedplate *d*, apparatus constructed essentially of two blocks *f f*, the inner surfaces, next to the saw, being covered with leather. Part of the upper surfaces f^2 f^2 of the blocks, are sloped downward and outward to allow the grease to run down through the slots f^3 f^3 into suitable receptacles f^4 f^4. Provision is made for obtaining the necessary amount of friction between the blocks *f* and the saw by means of a spring f^5, shown more clearly in the detail plan view Fig. 3.

In order to effect a cut cleanly and quickly, I form a band saw *a* having one of its cutting edges with its length partly saw teeth and partly knife-edged, the action of which is as follows:—In an ordinary piece of bacon, say, with a bone about the middle, I commence the knife-edged portion so as to slice through the fleshy part of the article, the table *e* being pushed outward so as to keep the bacon pressed up against the cutting edge. That part of the length of the saw which is toothed, would then be brought to the cutting point and saw through the bone, after which the remaining flesh could be sliced by the knife-edged part of its length coming around again. The table *e* is then slid back again so as to take another cut. For ordinary purposes I find the proportion of three feet of saw teeth to about five feet six inches of knife-edge to be very suitable but I do not confine myself to these lengths. In order to get the necessary frictional contact between the saw and its sheaves *b* and *b'* I cover the driving surfaces of the sheaves with leather; the "grip" being assisted by having holes *a'* pierced at intervals in the saw blade.

Attached to the under side of the bed plate *d* is a brush b^2 in contact with the driving surface of the bottom sheave *b'*, and of such a form as to overlap and brush the edges as well as the circumference, see Fig. 4. The upper sheave *b* is provided with a guard b^3 and a splash board b^4 which are so attached as to be readily removed.

It will be understood that the shaft *c* may be driven by an engine or other suitable motor.

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

1. In a meat-slicing machine a band-saw and cutter, having a continuous line of saw teeth on a portion of its edge, and having the remainder of its edge made with a cutting or knife edge, substantially as shown and described.

2. In a meat slicing machine, a grease cleaner composed of two blocks in frictional contact with the moving saw, and provided with grease receptacles located beneath them, all substantially as shown and described.

3. In a meat-slicing machine, the combination with a band saw, of a sliding table having pins or teeth to hold the meat while being cut, and blocks beneath the table serving to clean the grease from the band.

4. In a meat-slicing machine, the combination with an endless band having saw-teeth in continuous line on one part of its cutting edge, and a knife edge on the remainder of such edge, of grease cleaning blocks *f*, *f*, beneath the bed or plate, provided with sloping upper surfaces, grease receptacles f^4, beneath such blocks, and grease passages leading thereto from such surfaces.

In testimony whereof I, the said CHARLES WILSON, have hereunto set my hand this 20th day of February, 1893.

CHARLES WILSON.

Witnesses:
EDWARD HUNTER,
CHAS. W. DUNCAN.