

No. 627,625.

Patented June 27, 1899.

A. F. NATHAN.

APPARATUS FOR MARKING AND SMOKING MEATS.

(No Model.)

(Application filed Jan. 17, 1899.)

3 Sheets—Sheet 1.

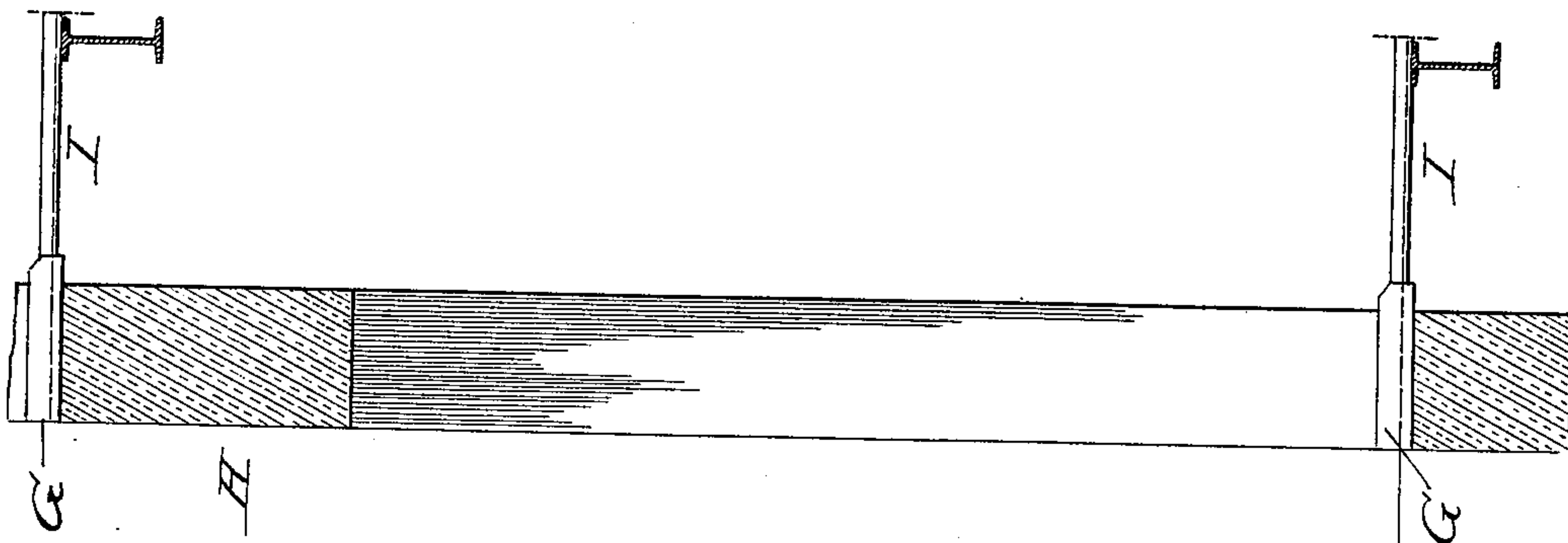
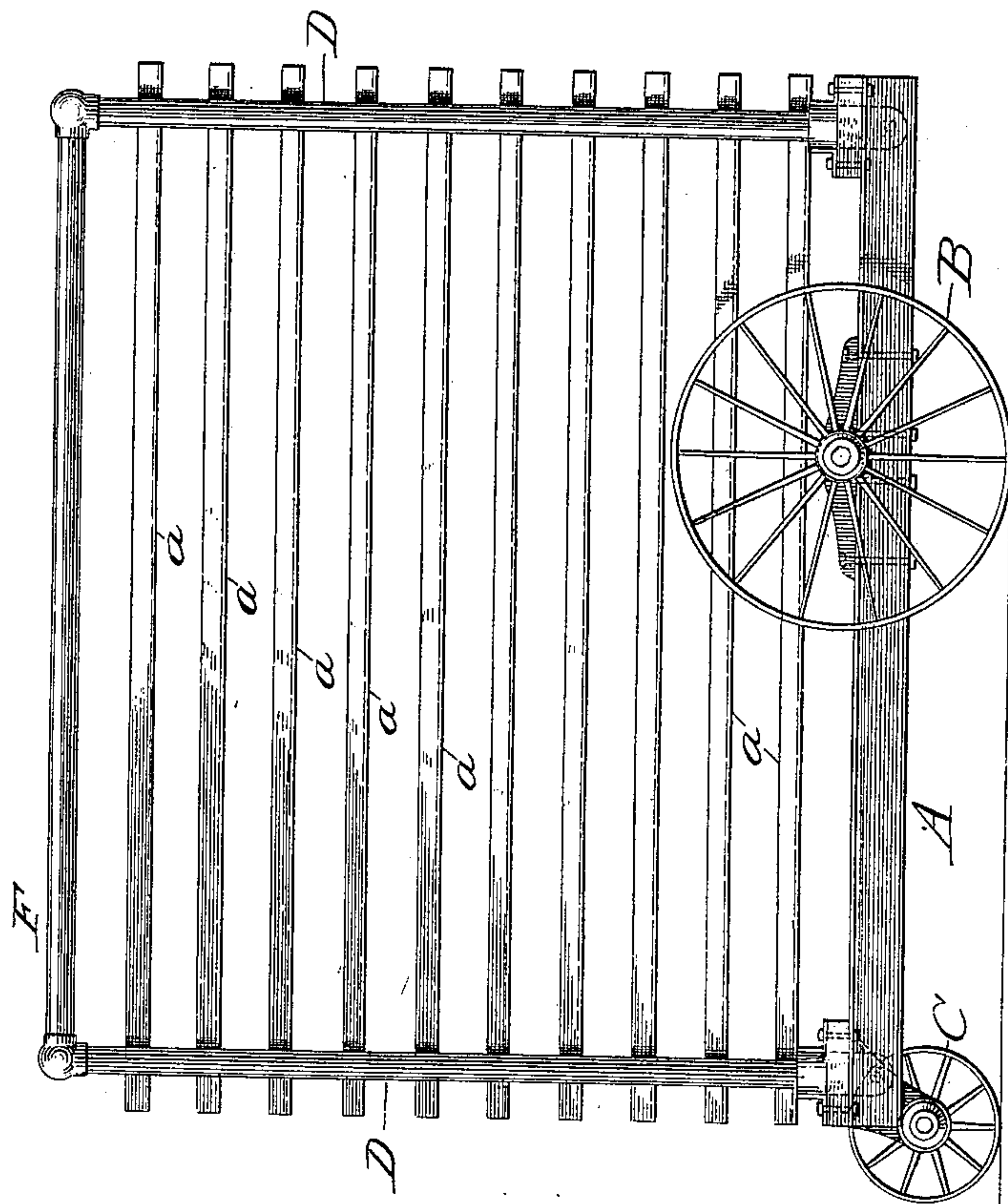


Fig. 1.



Attest;
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D. E. Burdine.

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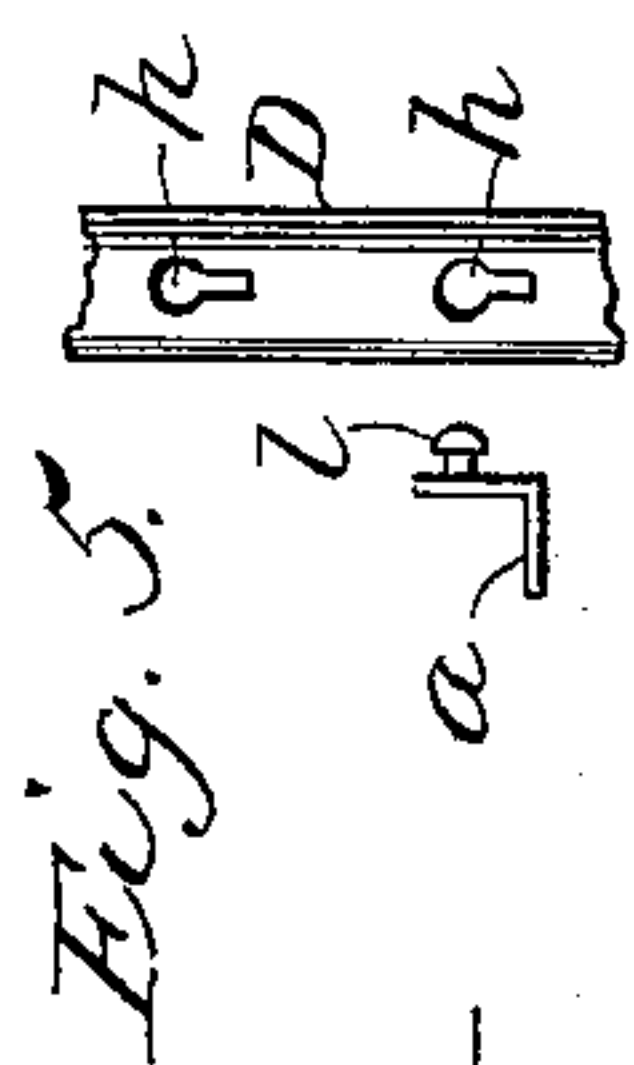
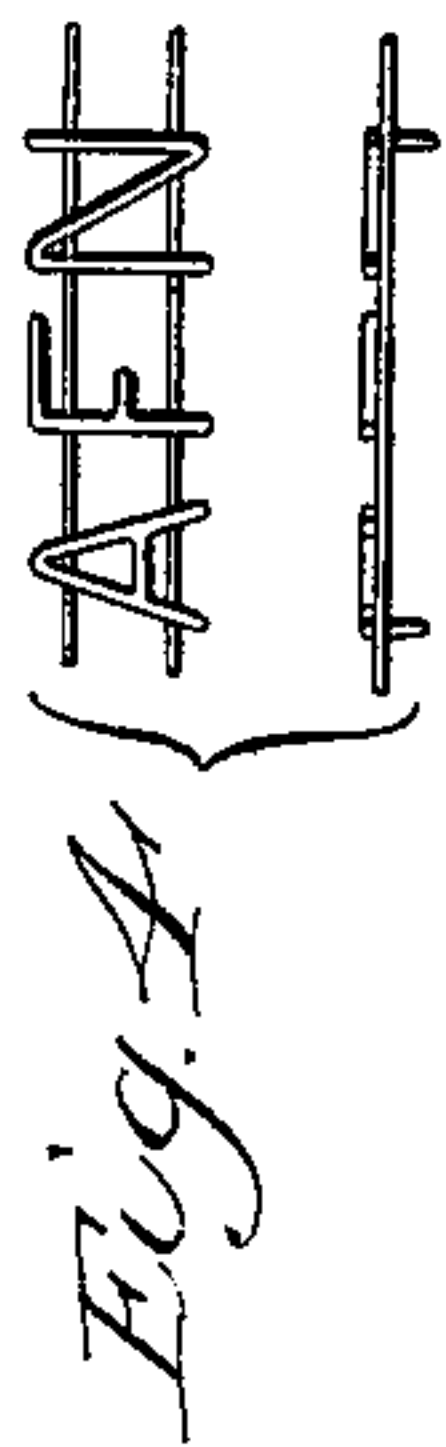
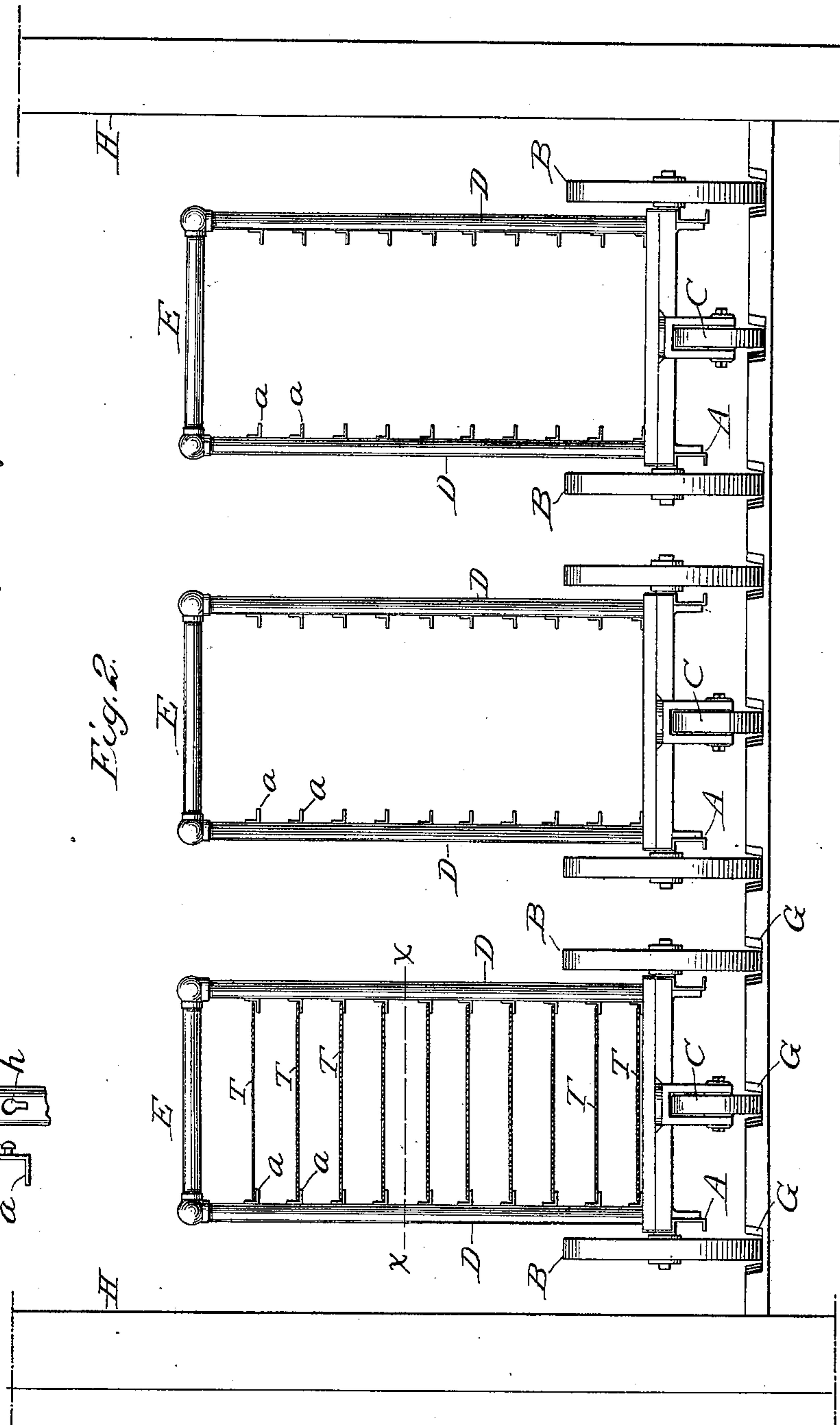


Fig. 2.



Attest:
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D. E. Burdine.

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by H. L. Dodge
Att.

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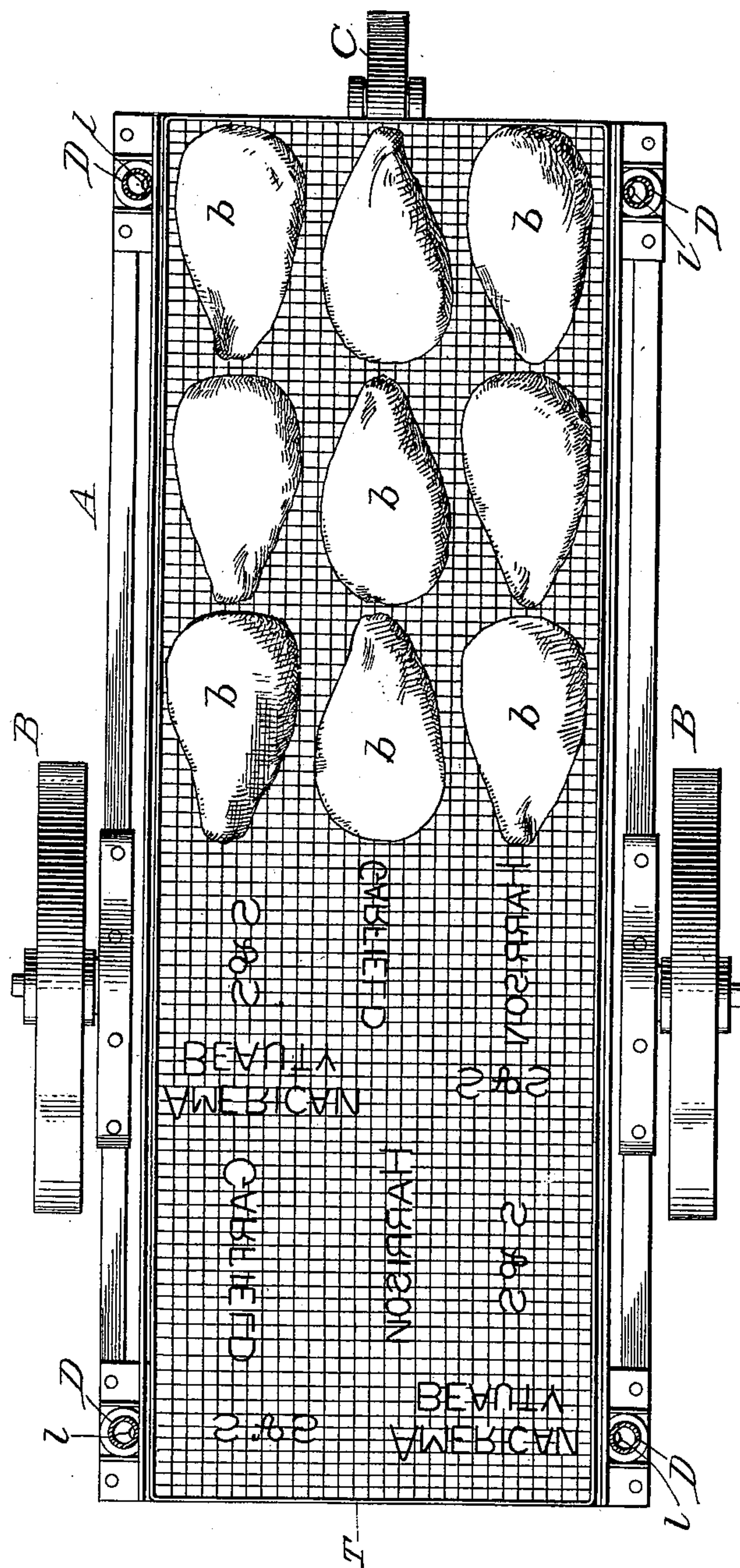
APPARATUS FOR MARKING AND SMOKING MEATS.

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(No Model.)

3 Sheets—Sheet 3.

Fig. 3.



Attest:
C. C. Birdine
D. E. Birdine.

Inventor,
A. F. Nathan.
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UNITED STATES PATENT OFFICE.

ALBERT F. NATHAN, OF KANSAS CITY, MISSOURI.

APPARATUS FOR MARKING AND SMOKING MEATS.

SPECIFICATION forming part of Letters Patent No. 627,625, dated June 27, 1899.

Application filed January 17, 1899. Serial No. 702,447. (No model.)

To all whom it may concern:

Be it known that I, ALBERT F. NATHAN, a citizen of the United States, residing at Kansas City, in the county of Jackson and State of Missouri, have invented certain new and useful Improvements in Apparatus for Marking and Smoking Meats, of which the following is a specification.

My invention relates to apparatus or means for applying the process or method of marking and smoking meats for which Patent No. 605,120 was issued to me on the 7th day of June, 1898; and the invention consists in a novel construction of a truck provided with a series of wire shelves having formed or placed thereon projections to produce the mark or marks which it is desired to impress on the several pieces of meat, as hereinafter more fully described.

Figure 1 is a side elevation of one of the trucks. Fig. 2 is an end elevation of a series of the trucks arranged side by side and showing the groove in the floor by which the trucks are guided into and out of the smoke-chamber. Fig. 3 is a transverse horizontal section of a truck on the line $x x$ of Fig. 2, showing one of the shelves with the marks and meat thereon. Figs. 4 and 5 are views showing details of construction.

As described in my prior patent, No. 605,120, the mark is formed by laying the meat while in a fresh or soft condition on a tray, the upper surface of which is provided with projecting letters or characters corresponding to the mark to be produced or impressed on the meat, so that when the meat is laid thereon and left while being smoked or cured these raised letters or characters will form indentations in the meat, which will remain fixed therein. It was then designed to provide a separate tray or support for each separate piece of meat and to place these trays or supports on horizontal bars in the smoke-house. Such a plan is laborious, in that it requires much time and labor to handle and place each tray with its piece of meat separately on the bars.

The object of my present invention is to reduce the labor required and greatly expedite the operation. To accomplish this result, I construct a series of trucks made as

shown in Figs. 1 and 2. These trucks consist of a bed or frame A, mounted on two wheels B, located near the front end, and a smaller wheel C at the center of the rear end, this latter wheel being swiveled to the frame to enable the truck to be turned and guided in any desired direction. At each corner of the bed or frame A is rigidly secured an upright metal post B, and these at their upper ends are connected by cross-bars E at front and rear and by longitudinal side bars F, as clearly shown in Figs. 1 and 2. This upright frame I prefer to make of gas or water pipe of the proper size, cut to the required lengths and fastened together by couplings and screw-threads at the corners, as shown, as the same can thus be made light, strong, and cheaply. To the inner side of the corner posts or uprights I secure a series of light L-shaped bars a , as shown in Fig. 2, these being arranged in a series along the two sides and extending from front to rear, as shown in Fig. 1, they being designed to support a corresponding series of shelves. The bars a are fastened to the posts B in such a manner that they can be adjusted vertically thereon, so as to bring the shelves which rest on the bars a closer together or farther apart, and thus adapt them to the varying thickness of the pieces of meat, hams and shoulders being much thicker, and therefore requiring correspondingly more space than bacon or similar thin pieces of meat. To accomplish this, I make on the inner side of the posts D a series of holes h , as shown in Fig. 5, these holes having a slot at their lower side of a size to receive the body of the bolts l , with which the bars a are provided, as shown in Fig. 5, the bolts l being provided with a head, as shown. It will readily be seen that when the heads of these bolts are entered in the enlarged portion of the holes h and their bodies dropped down into the slots the heads of the bolts will engage with the walls of the post, and thus hold the bars securely in place. To remove the bars, it is only necessary to raise them and draw the bolts out of the holes, and thus they can be adjusted as desired. The holes will be made close enough together to adapt the shelves to be placed at the proper distance apart to receive bacon or similar thin pieces

of meat, and when it is desired to use them for hams or shoulders they will be adjusted accordingly. By these means the trucks are adapted to holding all the various kinds or
 5 pieces of meat to be treated, and when the meat consists of bacon or other thin pieces a very much greater number of pieces can be placed on one truck, or, if desired, the shelves can be so adjusted that both thick and thin
 10 pieces can be placed in the same truck, thus adapting them to all the varying necessities of the various houses engaged in the business. It is obvious that other means may be used for adjusting the shelves; but the plan shown
 15 is simple and efficient, and is therefore preferred. Having thus constructed the truck-body, I then provide a series of reticulated or perforated shelves T, preferably made of a light metal frame, with wires or small rods
 20 crossing it in both directions, as shown in Fig. 3. On each of these shelves I secure the projecting letters or characters which are to form the marks on the meat, care being taken to so locate and arrange them on the shelf
 25 that when the shelf is covered with hams or other pieces of meat each ham or piece of meat will rest upon one only of these mark-forming projecting letters, words, or characters, as shown in Fig. 3. These marks or designs, which may be of any style or character
 30 preferred, and which of course will vary with each house or company using them and also with the various kinds of meat, may be made separate from the shelves, as represented in
 35 Fig. 4.

The letters or characters which constitute the mark I usually make of large wire or small metal rods bent into the proper shape or form, and if the design or mark consists
 40 of more than one letter or character I connect them by a finer wire or by small strips of metal secured to their under side by rivets or solder, as preferred.

Each mark is provided on its under side
 45 with two or more pins *e*, adapted to fit into the meshes or holes in the shelf, and thus hold the mark in place. By this construction it will be seen that the individual marks or designs can be changed in position on the shelf
 50 and be placed closer together or farther apart and be arranged lengthwise or crosswise of the shelf, as shown in Fig. 3, so as to adapt them to the varying sizes of the pieces of meat, whatever these may be.

In practice some of the shelves which will be used continually for one particular kind of meat—as, for instance, hams or shoulders, which vary but little in size—will preferably
 55 have the marks or designs permanently fastened in place, while others will be provided with them made detachable, or, if preferred, part may be permanently secured to the shelves and part be detachable.

Each truck is provided with a set of the
 65 shelves more or less in number, according to the height of the frame, nine being shown in

the left-hand truck in Fig. 2. The truck and shelves may be made of any size required, the only limit being the size that can be conveniently moved when fully loaded. When made
 70 of a size sufficient to hold eighteen hams on each shelf and nine shelves in a truck, it will be seen that each truck will hold one hundred and sixty-two shoulders or pieces of bacon and that all of these can be shoved together
 75 into or drawn from the smoke-chamber at once, thus greatly expediting the operation and requiring much less space than when the meat is hung up by strings, as was the former custom, besides saving the time and labor
 80 necessary to put in, tie, and subsequently remove the strings. To load these trucks, all the shelves, except the lower one, may be removed and the lower shelf then covered with the hams or other pieces of meat, (one being
 85 shown partly covered in Fig. 3,) after which another shelf will be inserted and covered, and so on until all the shelves have been inserted and covered with pieces of meat, when the loaded truck is ready to be run into the
 90 smoke-chamber. It is obvious, however, that the meat may be placed on the shelves before they are slid into the truck, if desired for any reason, though the former is the preferred plan.

The smoke house or chamber, one end of which is shown in vertical section and indicated by the letter H in Fig. 1 and transversely in Fig. 2, has its floor or sill at the entrance provided with grooves G of the proper
 100 size to serve as guides for the wheels of the trucks; and within, the chambers are provided with a series of trough-shaped rails I resting on girders and extending in parallel lines the entire length of the chambers, so that a large
 105 number of trucks can be run in on each of these tracks, the tracks being arranged side by side the whole width of the chamber, as represented in Fig. 2. It will thus be seen that a large amount of meat can be marked
 110 and smoked in a comparatively small chamber. These smoke-houses are usually constructed with several tiers or stories of rails arranged one above another, as indicated in
 115 Fig. 1, where two such tiers are shown, an elevator being arranged to raise the trucks to and lower them from the various tiers or stories. This construction of the smoke house or chamber, however, forms no part of the present invention, as these trucks may be
 120 used in other smoke-houses, and the reference herein to the special construction of the smoke house or chamber is only to better illustrate the best manner of using the trucks.

The great benefit arising from the use of
 125 these improved trucks by the saving of time and labor will be obvious to any one at all familiar with the business of preparing smoked meats, which has grown to be an enormous business, and need not, therefore, be further
 130 described.

I am aware that trucks of various kinds

have been used in dry-houses, brick-kilns, and similar structures, and therefore I do not claim a truck, broadly; but

What I do claim as my invention is—

5 1. In combination with a reticulated or perforated shelf, a detachable or movable design or character, such as described, for marking meat.

10 2. In combination with a reticulated or perforated shelf, a plurality of designs or characters such as described, said designs or char-

acters being removable and capable of application at different points on the shelf, whereby various designs may be used, and their relative position or arrangement on the shelf 15 may be varied at will.

In witness whereof I hereunto set my hand in the presence of two witnesses.

ALBERT F. NATHAN.

Witnesses:

H. A. WILLSON,

E. B. FLETCHER.