

I. Morrison.

Hog Weighing App.

Nº 2,083.

Patented Jun. 29, 1869.

Fig. 1

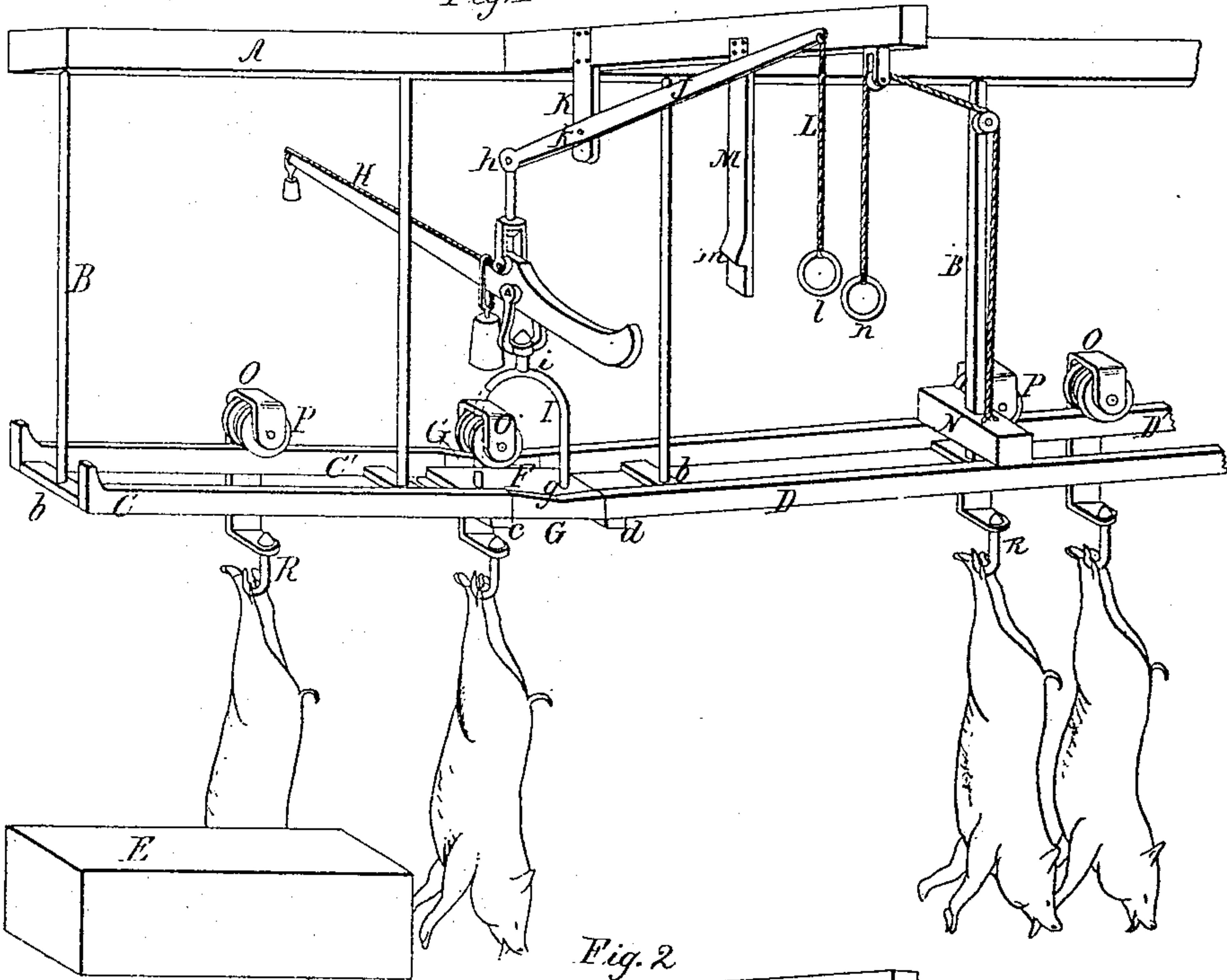
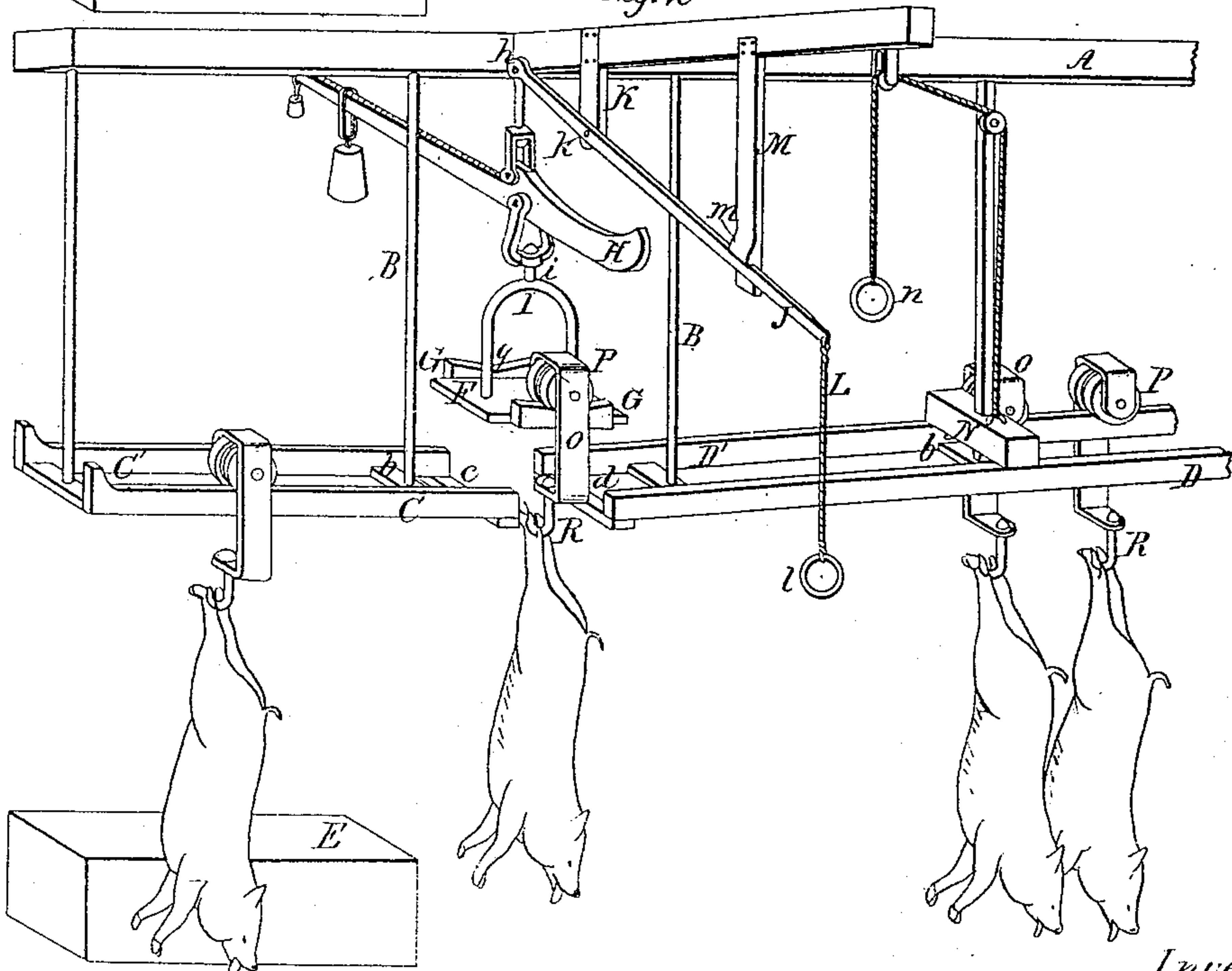


Fig. 2



Witnesses
E. A. Stewart
Sam H. Wright

Inventor
I. Morrison
By J. H. Knight

United States Patent Office.

THOMAS MORRISON, OF CINCINNATI, OHIO.

Letters Patent No. 92,083, dated June 29, 1869.

IMPROVEMENT IN WEIGHING-APPARATUS.

The Schedule referred to in these Letters Patent and making part of the same.

To whom it may concern:

Be it known that I, THOMAS MORRISON, of Cincinnati, Hamilton county, Ohio, have invented a new and useful Apparatus for Weighing Hogs, &c.; and I hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification.

This invention relates to a weighing-apparatus for use in pork-packing houses, where the hogs are transferred from the drying-room to the cutting-block by means of an elevated railway; and

My improvement consists in providing the railway with a detachable section, that is connected to the weighing-scale in such a manner that, by simply operating a suitable lever, both the scale and detachable section can be elevated so as to permit the weight of the hog being ascertained, it being understood that the hog is suspended from a carriage, or truck, which is permitted to run down an inclined portion of the said railway, and is detained upon and lifted with the said detachable section.

After the weight of the hog has been ascertained, the detachable section is lowered so as to be in line with the railway, and the truck to which the hog is suspended is run off on a track, which is located directly above the cutting-block.

In the accompanying drawings—

Figure 1 is a perspective view of a weighing-apparatus embodying my improvements, the detachable section being in its depressed position, or in line with the stationary portions of the railway, and a hog being shown as suspended from a truck, which is resting upon said detachable section.

Figure 2 is a similar perspective view, with the detachable section elevated so as to permit of the hog being weighed.

A represents a stout horizontal beam, which is located near the ceiling of the cutting-room; and depending from this beam are a number of rods, B, whose lower ends have attached to them cross-ties, b, which support a railway, which is constructed in the following manner:

The railway consists of two horizontal tracks, C C', and two inclined ones, D D', the former being situated above the cutting-bench E, and the latter portion of the track communicating with the drying-room of the pork-packing establishment.

Interposed between the horizontal portions C C' and inclined portions D D', of the railway, is a detachable section, F, whose rails, G, are recessed on their upper edges, as shown at g. In its depressed position, this section F is supported by bars c and d, in such a manner as to cause its rails G to be coincident with those, C C' and D D', as shown in fig. 1.

The detachable section F is connected to the scale-beam H by means of the stirrup I and swivel-coupling i.

The scale-beam H, instead of being pivoted to a fixed object, is attached, at h, to one end of a lever, J, the latter being fulcrumed to the standard K, at k.

The lever J is operated by a rope, L, and ring, l.

M is a bar, having, near its lower end, a shoulder, m, against which the lever J impinges when its long arm is depressed to the position shown in fig. 2.

Resting upon the inclined portions D D', of the railway, is a gravitating-stop, N, which serves to arrest the descent of the trucks O, and this stop can be elevated when desired by the operator pulling down the hand-ring n.

The object of elevating the stop N is to permit of only one truck at a time descending the inclined railway D D', and running upon the detachable section N.

The trucks O are supported upon grooved wheels, P, which are adapted to run upon either of the tracks C C', D D', or G, and said trucks are provided with hooks, R, upon which the hogs are hung.

The operation of my weighing-apparatus is as follows:

The carcasses of the hogs are first removed from the drying-room and hung upon the hooks R of the trucks O, when the latter are permitted to descend either of the inclined portions D D' of the railway, until they come in contact with the stop N, when their progress is arrested.

The operator now momentarily elevates said stop, so as to permit of one truck descending the rest of the incline, and running upon the tracks G of the detachable section F, where said trucks are detained by the rollers P entering the recesses g, as shown in fig. 1.

The operator then pulls down upon the hand-ring l, which act causes the lever J to vibrate upon its pivot k, thereby elevating the scale-beam H, stirrup I, detachable section F G g, and its accompanying truck and carcass.

The detachable section and its load having been thus elevated, the long arm of the lever J is engaged under the shoulder m for a sufficient length of time to allow the weight of the hog to be ascertained, as shown in fig. 2.

After the hog has been weighed, the lever J is disengaged from under the shoulder m, and the beam H, with the section F and the truck O, are allowed to descend, and the truck is shoved out of the recess g, upon either of the horizontal portions C C' of the railway, in which position the carcasses are dropped upon the cutting-block E.

The detachable section F being supported upon the swivel-coupling I i, enables said section being rotated in a horizontal plane, whenever it is desired to transfer a truck from one of the inclined tracks to the opposite horizontal track, as from D' to C, or from D to C'.

In the illustration, my improvements are shown as adapted to a first-class pork-packing house; but for

small establishments, only a single inclined and horizontal track may be employed, in which case the swivel-connection I *i* may be omitted.

In some cases, the position of the lever J may be reversed, permitting it to be operated by the weigher, thereby dispensing with a boy or other assistant.

With this weighing-apparatus, one man and a boy can do more work than can be performed by a dozen men with the method usually employed for weighing hogs in a pork-house, and as no part of the apparatus is concealed, drovers can have the satisfaction of knowing the exact weight of their hogs before being cut up.

I have described my invention as applied to the weighing of hogs, but do not propose to limit myself to this single application, as it is evident that the apparatus may be employed for weighing various other animals, articles of merchandise, &c.

It is not necessary that one part of the railway should be horizontal and another portion inclined, as shown in the drawings, as it may be more convenient in some establishments to make both sections of the fixed tracks horizontal, or both inclined.

I claim herein as new, and of my invention—

The combination and arrangement of the detachable section F G *g* and stop N *n* with the elevated rail-track, as and for the purpose described.

In testimony of which invention, I hereunto set my hand.

THOMAS MORRISON.

Witnesses:

SAML. KNIGHT,

JAMES A. LAYMAN.