Feb. 24, 1948. J. A. CARLSEN 2,436,629

HOG JAW PULLER

Filed Feb. 15, 1946

Fig. 1.

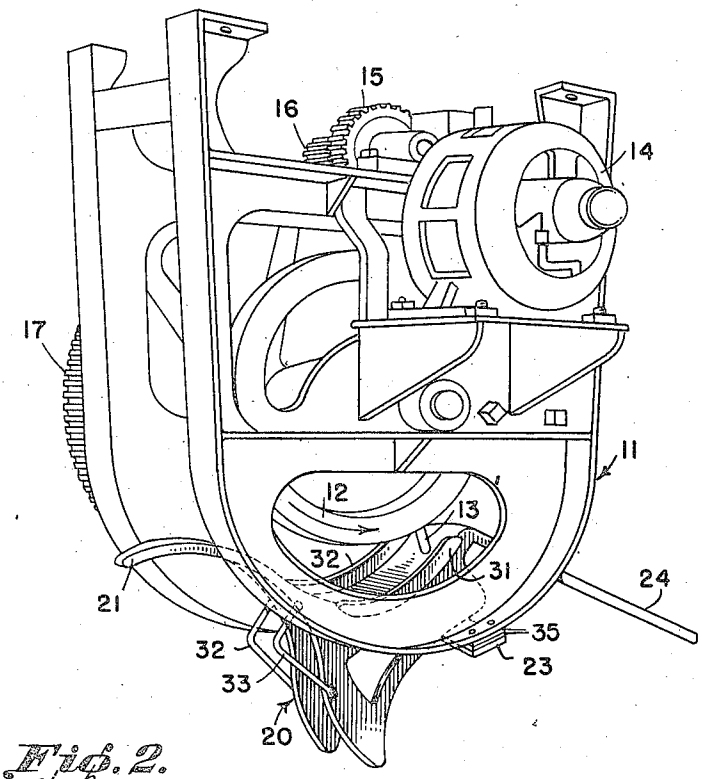
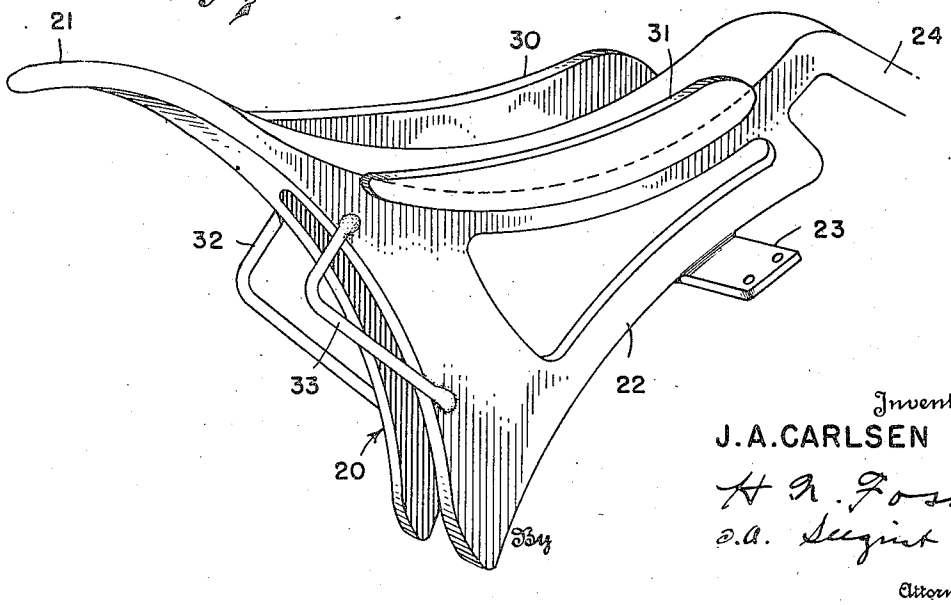


Fig. 2.



Inventor

J. A. CARLSEN

H. R. Foss

O. A. Seguist

Attorney

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UNITED STATES PATENT OFFICE

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HOG JAW PULLER

John A. Carlsen, Omaha, Nebr.; dedicated to the free use of the People in the territory of the United States

Application February 15, 1946, Serial No. 647,988

1 Claim. (Cl. 17—1)

(Granted under the act of March 3, 1883, as amended April 30, 1928; 370 O. G. 757)

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This application is made under the act of March 3, 1883, as amended by the act of April 30, 1928, and the invention herein described, if patented, may be manufactured and used by or for the Government of the United States of America for governmental purposes without the payment to me of any royalty thereon.

I hereby dedicate the invention herein described to the free use of the People in the territory of the United States to take effect on the granting of a patent to me.

This invention relates to a hog jaw puller of the type used in abattoirs for extracting the lower jaw from the head of a slaughtered hog.

The object of the invention is to improve certain portions of the puller in such manner as to prevent the teeth of the lower and upper jaws from violently engaging any portion of the device while the jaw is being pulled, thus to prevent shattering or breakage of the teeth and consequent contamination of the meat products with fragments of teeth.

For a complete description of the invention, reference is made to the accompanying drawing, in which

Figure 1 is a three-dimensional view of the complete puller; and

Figure 2 is a three-dimensional view of the elemental portion in which the improvement resides.

The puller is provided with a frame 11 adapted to be mounted overhead in convenient position relative to the operator. A revolving wheel 12 is mounted on the frame, and is provided with radially extending pins, one of which is shown at 13 on its periphery. The wheel is driven in a counterclockwise direction, as viewed in Figure 1, by means of a motor 14 suitably geared by gear train 15, 16 and 17 to the wheel. Thus far described, the puller is of conventional design.

The improvement of this invention relates to the horn generally designated by the numeral 20. The horn, as usual, is provided with an extending portion 21 on which the head, after removal of the tongue, chiseling and templing, is manually fed through the mouth with the skull down. An intermediate portion 22 of the horn has brackets mounted thereon, one of which is shown at 23 for securing the horn on the frame 11 in position below the wheel 12 and adjacent the periphery thereof. In operation, the head is fed on the extending portion and a pin of the revolving wheel engages in the notch of the lower jaw. Due to the arrangement of parts, the skull is stopped and the moving pin completely extracts the lower jaw therefrom. The skull and upper jaw fall down, and the lower jaw is carried forward until it straddles an inclined rod 24 which is secured to the intermediate portion of the horn opposite extending portion 21. The lower jaw then slides

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down the rod and may be deposited in a suitable container as desired.

In particular, according to the present invention, the horn has on the intermediate portion side pieces 30 and 31 fixed thereto as by welding. This provides an upwardly facing channel so that the incisors of the lower jaw ride through the channel, the gums riding on the upper edges of the side pieces of the channel. This prevents undue or violent engagement of the teeth, especially the incisors, with any parts of the horn, thus to prevent shattering of the teeth.

Extensions 32 and 33 are also fixed to the horn in position to be engaged by the cheek bones of the skull, while the protruding end of the upper jaw extends in the space between the extensions. This prevents the upper teeth, especially the incisors, from engaging the horn, since the impact force due to stoppage of the skull is imparted to the cheek bones.

In order that the horn may be mounted a proper and adjustable distance from the revolving wheel, shims 35 are provided for insertion between or removal from between the frame and mounting brackets 23.

Although the horn is shown with parts 30, 31, 32 and 33 as members secured thereto, it is obvious that these parts may be integrally cast or otherwise fixedly mounted on the horn, if desired.

Having thus described the invention, what is claimed is:

A hog jaw puller having a frame, a revolving wheel mounted on the frame and provided with radially extending pins on its periphery, means for driving the wheel, and a horn mounted on the frame adjacent the periphery of the wheel, said horn having an extended portion on which the head of a slaughtered hog may be fed through the mouth in position for one of the moving pins to engage in the notch of the lower jaw and extract the jaw from the skull, an intermediate portion having a channel through which the lower incisors ride free of contact with parts of the horn with the lower gums engaging the edges of the channel and extensions fixedly mounted on the intermediate portion in position to be engaged by the cheek bones with a space between the extensions in which the protruding end of the upper jaw extends with the upper teeth prevented from engaging parts of the horn.

JOHN A. CARLSEN.

REFERENCES CITED

The following references are of record in the file of this patent:

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