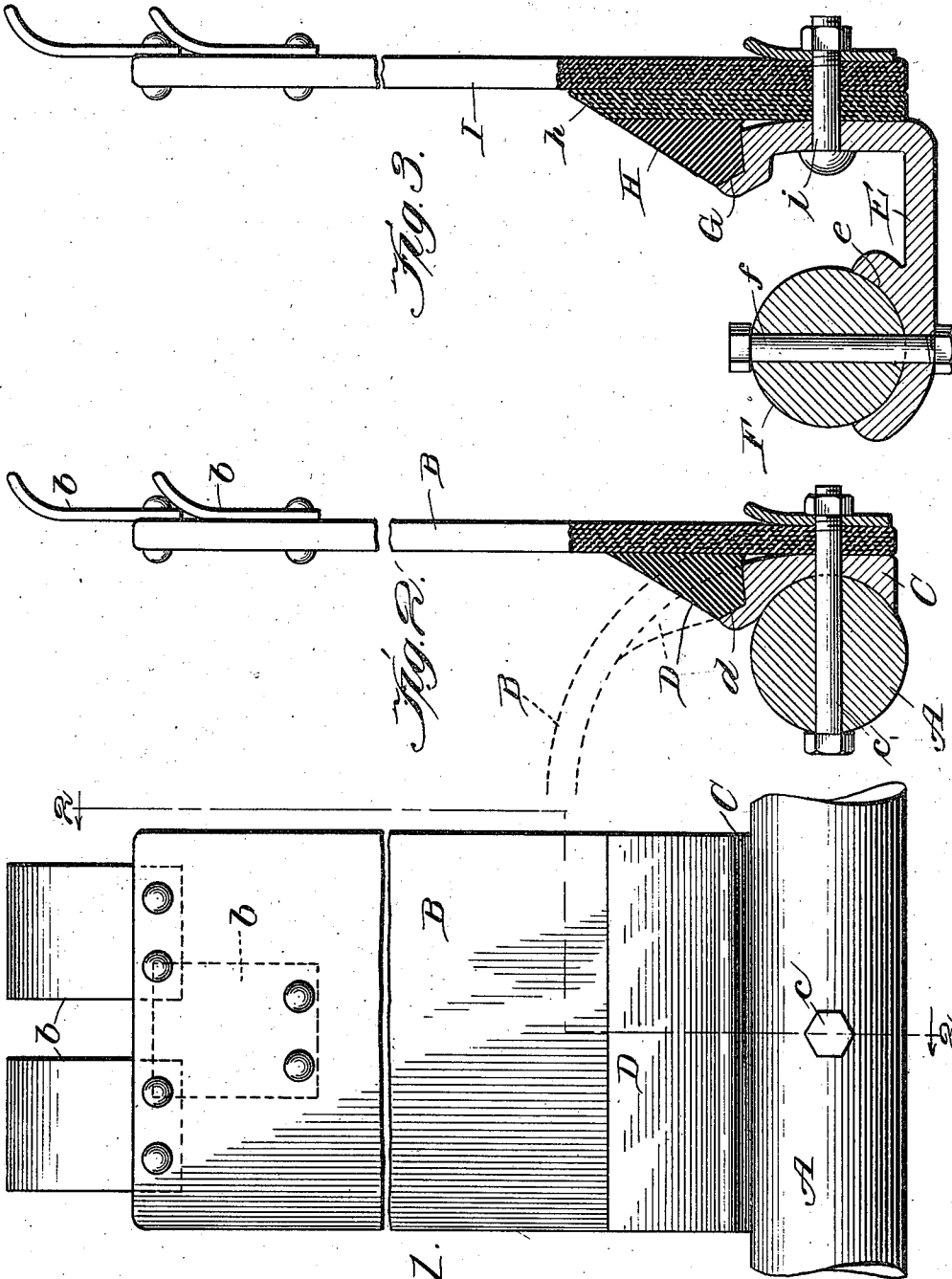


W. GUSSENHOVEN.
 BEATER FOR HOG SCRAPING MACHINES.
 APPLICATION FILED JUNE 28, 1909.

965,293.

Patented July 26, 1910.



Witnesses:
 E. H. Lundy.
 M. C. Martin.

Fig. 1.

Inventor
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 by Frank D. Thomaason
 atty

UNITED STATES PATENT OFFICE.

WALTER GUSSENHOVEN, OF CHICAGO, ILLINOIS, ASSIGNOR TO REVERE RUBBER COMPANY, OF BOSTON, MASSACHUSETTS, A CORPORATION OF MASSACHUSETTS.

BEATER FOR HOG-SCRAPING MACHINES.

965,293.

Specification of Letters Patent.

Patented July 26, 1910.

Application filed June 28, 1909. Serial No. 504,756.

To all whom it may concern:

Be it known that I, WALTER GUSSENHOVEN, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented new and useful Improvements in Beaters for Hog-Scraping Machines, of which the following is a full, clear, and exact description.

My invention relates to machines for automatically scraping and cleaning hogs wherein the carcass of the animal is conveyed past one or more rows of rapidly revolving beaters having metal scraping blades mounted on their unsecured ends.

Considerable difficulty has been found in obtaining a beater strap that will not form a "set" at the point of bend owing to the curvature it usually takes during its operation. It has been ascertained that a beater strap that can be caused to return to its original shape, that is, to straighten out flat when not in operation will successfully accomplish the purpose long sought after by machinists and others employed in this particular line of manufacture. These beater straps usually comprise rubber interposed between and surrounding a plurality of layers of canvas, duck, or other coarsely woven fabric, and vulcanized. Thus, when the rubber strap has once taken on its "set" it must be discarded for a new one. This becomes an item of considerable expense with packers and slaughter-houses where meat is dressed for the market.

It is the object of my invention to overcome this disadvantage by constructing a beater strap that will not crease or "set" at its point of greatest curvature and which, after striking the carcass, will assume a normally straight position. I accomplish this by disposing a soft rubber cushion between the secured end of the strap and its mounting bracket on the shaft or pulley, and which I have fully described in the following specification and more particularly pointed out in the claims.

In the drawings:—Figure 1 is a vertical front elevation on one of my improved beater straps showing the same mounted on its shaft. Fig. 2 is an edge view thereof partly in section, on the line 2—2, Fig. 1. Fig. 3 is a similar view of a slightly modified construction showing the same attached to a spacing bracket.

Referring to the drawings, A represents

a suitable rotatable shaft, that preferably extends the length of the machine and to which a plurality of beater straps B are usually attached. These beater straps B preferably comprise an elongated strip of narrow composite rubber fabric (that is, layers of canvas, duck and the like, interposed between and surrounded by layers of rubber) and to the outer unsecured ends of which metal scraper-blades or fingers *b* are preferably secured by means of rivets or otherwise. Said straps are of such proper length that when the shaft is rotated their scraper ends will wind backward and beat against the carcass as it passes near the same. Suitable mounting brackets C having a concave seat portion that engages the shaft are secured to said shaft by means of bolts *c* that pass through the beater-strap, said bracket and the shaft and clamp the same firmly together. As shown, the upper portion of this bracket is provided with a recess *d* that forms a seat for a portion of a soft rubber cushion D interposed between the inner surface of the beater and said bracket. This cushion fits snugly in said recess and is, preferably, greater in thickness than the depth of the same so that a space is left between the adjacent end of the bracket and the beater strap, as shown. The upper outer portion of said cushion preferably tapers or reduces in thickness toward the strap to a thin edge or lip which bears against the same. The construction of this cushion is such that when the shaft is rotated and the strap curves backward it causes the cushion to compress and bend while the inner portion of the strap will lie against the bracket as shown in dotted lines in Fig. 2 of the drawings. When the machine is not in operation the cushion gives the strap sufficient stiffness to straighten it out and thus prevents a "set" forming in the same as the bend or curve is greatest at this particular point. The cushion may either be separate from the strap or may be vulcanized to the same as desired.

In the modification shown in Fig. 3 of the drawings the supporting bracket E is preferably L-shaped having a concave seat *e* near one of its ends whereby it is attached to the shaft F by a bolt *f*. The lateral arm of said bracket is preferably tangential to the shaft for a portion of its length and then takes a curve approximately concentric

to the axis of the shaft. The outer portion of this lateral arm is provided with a recess G, similar to that in the preferred form, to receive the cushion H for the strap. This cushion H is preferably mounted to separate piece *h* of the rubber fabric similar to the strap that is interposed between said strap I and the bracket and the several parts secured in place on the bracket by a transverse bolt *i* that passes through the same. When the cushion is seated in the recess G the operation and effect of the same is identical with that described in connection with Figs. 1 and 2 above referred to.

15 What I claim as new is:—

1. A beater for scraping machines comprising a rotatable shaft, a flexible beater-strap, a bracket secured to and extending from said shaft having a portion against which said strap is seated, and a cushion adapted to press against a portion of said strap.

2. A beater for scraping machines comprising a rotatable shaft, a flexible beater-strap, a bracket secured to and extending from said shaft having a lateral seat for said strap, and a cushion engaging said seat and adapted to press against a portion of said strap.

3. A beater for scraping machines comprising a rotatable shaft, a flexible beater-strap, a bracket secured to and extending from said shaft, a seat thereon for said strap having a recess in its outer face, and a cushion seated in said recess and engaging said strap.

4. A beater for scraping machines comprising a rotatable shaft, a flexible beater-strap, a bracket secured to and extending from said shaft, a lateral seat thereon for

said strap having a recess in its outer face, and a cushion seated in said recess and engaging said strap.

5. A beater for scraping machines comprising a rotatable shaft, a flexible beater-strap secured thereto, and a cushion adapted to press against a portion of said strap the outer side of said cushion tapering toward said strap.

6. A beater for scraping machine comprising a rotatable shaft, a flexible beater-strap, means to which said strap is secured for connecting the same to said shaft, and a cushion interposed between said strap and said connecting means the outer side of said cushion tapering toward said strap.

7. A beater for scraping machines comprising a rotatable shaft, a beater strap, means to which said strap is secured for connecting the same to said shaft having a recess in its outer end, and a cushion seated in said recess and engaging said strap, and having an elongated portion that is tapered away from said recess in contact with said strap.

8. A beater for scraping machines comprising a rotatable shaft, a beater strap, a bracket secured to said shaft having an extended end provided with a recess, and a cushion seated in said recess and engaging said strap, and having an elongated portion that is tapered away from said recess in contact with said strap.

In witness whereof I have hereunto set my hand this 23d day of June 1909.

WALTER GUSSENHOVEN.

Witnesses:

E. K. LUNDY,
M. E. MARTIN.