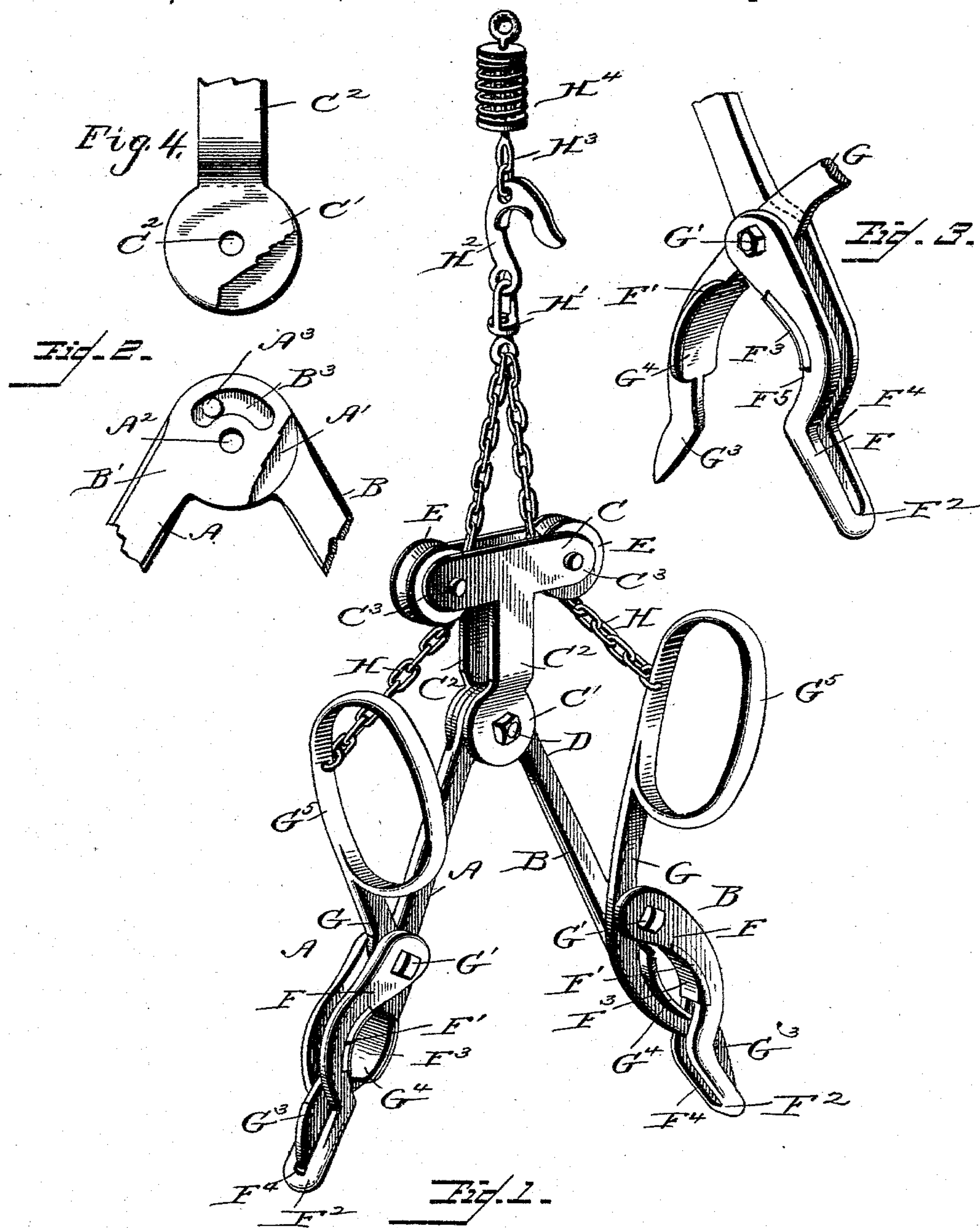


(No Model.)

S. M. GUSDORF & D. S. BLUE.
SHACKLE.

No. 495,034.

Patented Apr. 11, 1893.



Witnesses

"*Wm. L. Shedd*"

J. J. Owen.

Inventors

Solomon M. GUSDORF.

Dennis S. Blue.

By Attorneys

Don't forget to pay your

UNITED STATES PATENT OFFICE.

SOLOMON M. GUSDORF AND DENNIS S. BLUE, OF FREMONT, OHIO.

SHACKLE.

SPECIFICATION forming part of Letters Patent No. 495,034, dated April 11, 1893.

Application filed September 22, 1892. Serial No. 446,606. (No model.)

To all whom it may concern:

Be it known that we, SOLOMON M. GUSDORF and DENNIS S. BLUE, citizens of the United States, residing at Fremont, in the county of Sandusky and State of Ohio, have invented certain new and useful Improvements in Shackles; and we do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

Our invention relates to an improvement in those shackles used in slaughtering and packing houses whereby the animal is caught by the legs and swung in the air preparatory to slaughtering.

Our object is to construct a more efficient arrangement for catching and suspending the animal by two legs, usually the hind ones, thereby avoiding breaking the leg or joint of the animal, which process is very detrimental to the value of the hams.

Further objects are to construct the jaws or grippers so that they will more effectually grasp and hold the animal's leg and to arrange them so that they may be spread apart or contracted to suit the size of the animal caught, or the position of its legs.

To these ends our invention consists of certain novel features and combinations of parts more fully described hereinafter and pointed out in the claims.

Referring to the accompanying drawings: Figure 1 represents a perspective view of our complete arrangement; Fig. 2 a detail view of the means by which the grippers are connected; Fig. 3 an enlarged view of one of the grippers, and Fig. 4, detailed view of a part of the pulley frame.

The reference letters A and B represent a pair of arms each forming one member of the grippers or jaws of the device. These arms are pivotally connected at their upper ends by means of the arrangement shown by Fig. 2. This is effected by means of the flattened ends A' and B' each provided with a central hole A² through which the locking pivot or pin passes. Formed on one side of the flattened portion A' is a pin or stud A³ which projects

outwardly from the flattened portion a distance equal to the thickness thereof and is adapted to pass into the elongated slot B³ formed in the flattened portion B'. The slot B³ is so curved that it extends in a direction parallel to that of the outer edge of each of the faces A' and B'. When the flattened portions of the arms A and B are in position they will lie one upon another and are embraced by the end C' of the pulley frame C. These ends are of a size equal to that of the portions A' and B' and are provided with a central opening or hole C² corresponding to the holes A² in the arms. Through these openings or holes the pin D passes thereby pivotally securing the arms A and B in position, their movements being limited by the pin and slot arrangement just described.

The pulley frame C, is constructed of two twin sheet metal plates C² substantially T-shaped. The arm ends C³ being adapted to hold the pulleys E, E, the use of which will be described hereinafter, the lower end of the body being used for clamping the arms A and B as explained.

The arms A and B are duplicates of each other and a description of one will answer for both. The lower end F of each arm is bent back and extends parallel with the remaining portion. These two parts of the arm are then bent to form an indentation or concave portion F' and outwardly flaring nose F². Secured to each section of the arm A or B is a block or facing F³ forming part of the jaw or gripper. This block is faced with rubber, felt, or with any material which will cushion the same and prevent injuring the animal's leg which is the purpose of the rubber or felt if such material be used.

Pivoted at G' between the end of the bent portion F, and the body or remaining portion of the arm A or B, as the case may be, is the second gripper-jaw, or lever G. This lever is in the shape of a reverse curve and is provided with an indentation registering with F⁵ in the arms A and B. The free ends of the arms G are curved outwardly to form a nose G³. Formed integral with or rigidly secured to the arms G, are curved plates or faces G⁴. These plates register with the plates or blocks F³ of the arms A and B, and are likewise covered with cushioning material.

The upper ends of the arms G, G, are formed with oval-shaped handles or grasps G⁵ by which the device is held and manipulated as will be hereinafter explained. The outwardly curved noses or ends G³ of the arms G, are adapted to pass between the bent portions of the arms A and B, at F⁴ when the arms are contracted and the gripper closed.

Securely fastened to the upper ends of the arms G, G, are the chains H, H. These chains pass around the pulleys E, E, and come to a juncture at the swivel H' which in turn is secured to the hook H², by means of which the device may be suspended.

Fastened to the curve of the hook H² is a single chain H³. This chain extends a short distance beyond the hook and has located at a point between its ends the spring cushioning device H⁴, which is designed to ease the shock of the device when it and its load are suddenly lifted from the ground. This cushioning device may consist of any suitable arrangement of springs and connecting rods that may be thought expedient.

To use our improved arrangement for catching and suspending animals, usually hogs, the operator grasps the handles G⁵ of the arms G, spreading them apart so that the gripper jaws will be opened. He then advances to the animal and passes the grippers around its legs. This is made easy by the flaring ends or noses F² and G³ which when open form guides. When this has been done the arms G, G, are contracted and the signal given for the raising of the animal. This is done by pulling on chain H³. When the chains H, H, tighten it follows that the arms G, G, are drawn tightly inward, which as before explained, securely closes the jaws. The animal may then without difficulty be passed through the various steps preparatory and subsequent to slaughtering.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In an animal catching and suspending device, the combination with a pair of grippers, of a chain arranged to close the same, and a cushioning device attached to the chain at a point between its ends, all substantially as described.

2. In an animal catching and suspending device, the combination of pivoted arms, a pair of levers one of which is fulcrumed on

each of the arms, grippers formed by each pair of arms, and levers and flaring ends or noses formed on the arms and levers and adjacent to the grippers, all substantially as described.

3. In an animal catching and suspending device, the combination of two arms, having flattened faces formed on their upper ends, a pin on one of the said faces, an elongated slot in the remaining face into which the said pin fits, a pivot passing through openings in each of the faces, a pair of levers one being fulcrumed to each of the arms, and means substantially as described for tightening and suspending the device.

4. In an animal catching and suspending device the combination of a pulley frame a pair of arms pivoted thereto so as to have a limited movement toward and from each other, a lever fulcrumed to each of the arms, the said arms and levers forming a pair of grippers, and chains attached to the levers and running over the pulleys in the pulley frame by which chains the levers are operated and the entire arrangement suspended.

5. In an animal catching and suspending device, the combination of a pair of arms having a limited movement toward and from each other, a gripper attached to each of the arms and a chain or chains by which the grippers are operated and the entire arrangement suspended.

6. In an animal catching and suspending device the combination of a pair of arms having a limited movement toward and from each other, a gripper attached to each of the arms, a chain by which they are operated and a cushioning device interposed between the gripper and the point from which the chain is suspended.

7. In an animal catching and suspending device, the combination of a pulley frame, a pair of arms pivoted thereto, a lever fulcrumed to each of the arms, and a chain attached to the levers and passing over the pulleys in the pulley frame, by which chain the levers are operated and the device suspended.

In testimony whereof we affix our signatures in presence of two witnesses.

SOLOMON M. GUSDORF.
DENNIS S. BLUE.

Witnesses:

SOL. M. WOLF,
JAMES H. FOWLER.