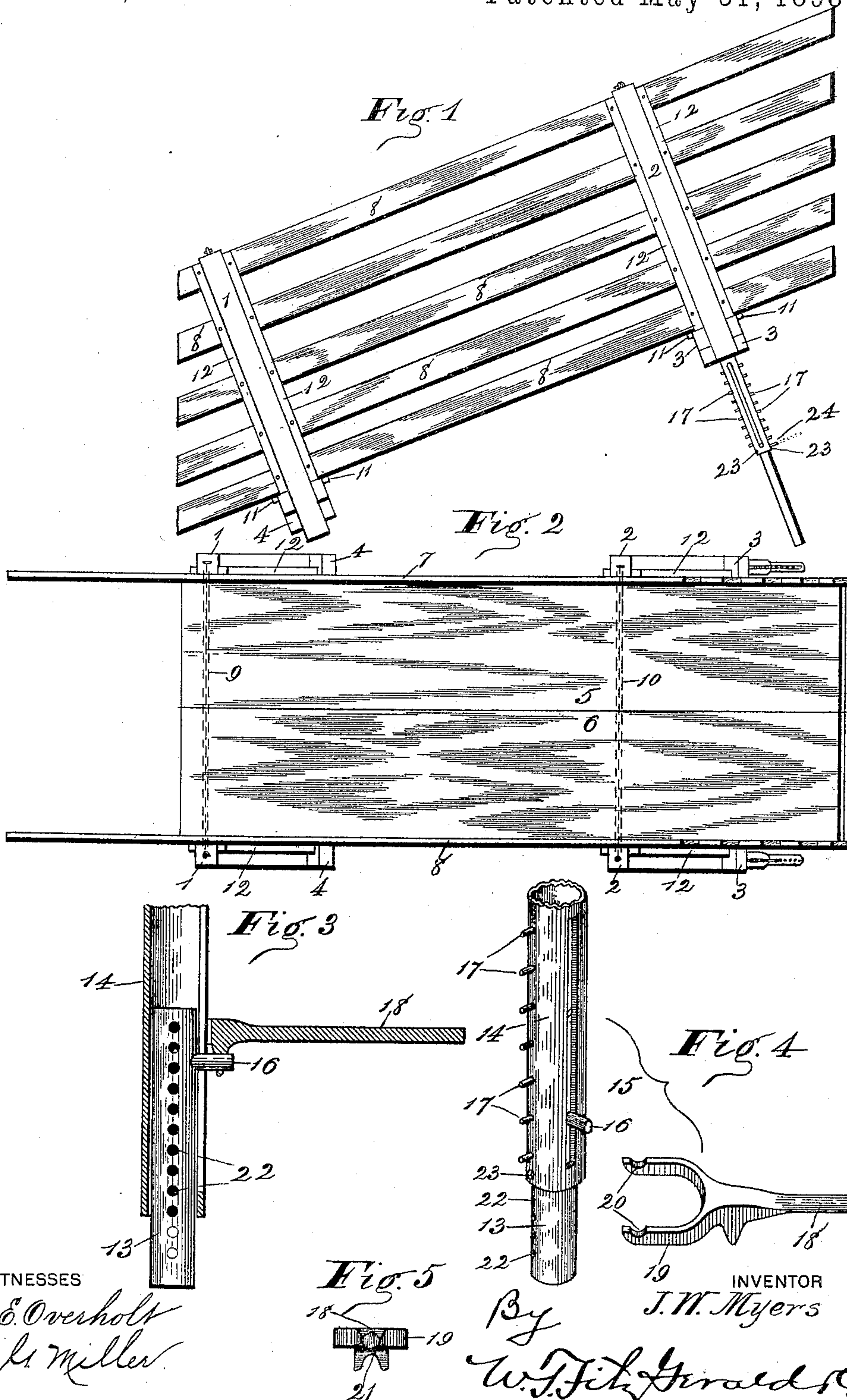


(No Model.)

J. W. MYERS.
CHUTE.

No. 604,834.

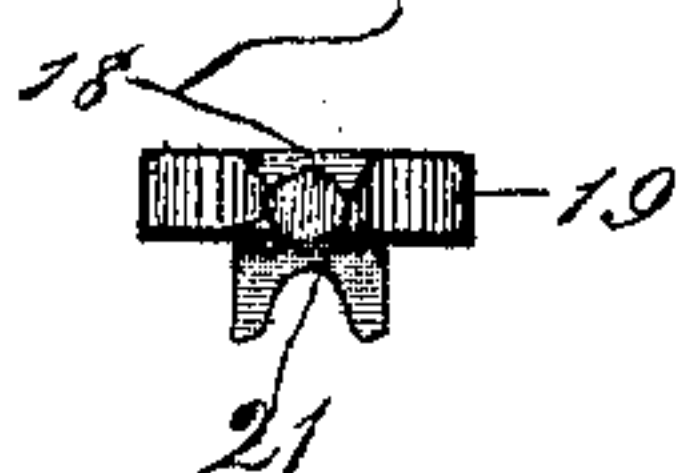
Patented May 31, 1898.



WITNESSES

E. E. Overholt
A. J. Miller

Fig. 5



By

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INVENTOR

J. W. Myers

ATTY'S.

UNITED STATES PATENT OFFICE.

JOSEPH W. MYERS, OF SIKESTON, MISSOURI.

CHUTE.

SPECIFICATION forming part of Letters Patent No. 604,834, dated May 31, 1898.

Application filed January 28, 1897. Serial No. 621,081. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH W. MYERS, a citizen of the United States, residing at Sikeston, in the county of Scott and State of Missouri, have invented certain new and useful Improvements in Chutes; and I do hereby 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.

My invention pertains to chutes intended for loading stock upon railway-cars, wagons, and other vehicles, the object being to provide a reliably efficient construction which will be simple in the arrangement of parts and involving a small expense.

A further object is to provide that the several parts thereof shall be detachable from the others, enabling the entire chute to be placed within a small compass for facilitating the movement of the same from place to place.

A further object is to enable the device to be easily adjusted to conform to the varying height of the vehicle into which the stock is to be directed.

All of these features will be clearly brought out in the following specification and illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of my improved chute ready for use. Fig. 2 is a top plan view. Fig. 3 is a detail in section of the adjusting mechanism. Fig. 4 is a perspective view of Fig. 3. Fig. 5 is an end view of the lever.

Reference will be had to the several details involved by figures, the same figure designating the same part throughout the drawings.

In carrying out my invention I provide the supporting-standards 1 2, arranged in pairs and disposed upon either side of the chute. The standards are connected by the cross-section or supporting-beams 3 4, the ends of which are mortised or otherwise secured to their respective standards. The cross-beam 3 is disposed at a greater distance from the ground than is the case with the disposition of the beam 4, the object being to arrange the floor of the chute at an inclination which will conform to the height of the vehicle into which the stock is to be conveyed. Upon the

supporting or cross beams 3 4 I place the floor-sections 5 6, while resting against the inner edges of the standards 1 2 are the side sections 7 8, as is clearly shown in Fig. 2 of the drawings.

I prefer to form the side sections of a series of slats arranged a sufficient distance apart to subserve the purpose intended and yet do so with the use of a minimum amount of material, rendering the device easily portable and under the control of the person using it.

In order to guard against undue lateral strain and a consequent spreading of the standards 1 2, I arrange upon the upper ends thereof the locking wires or chains 9 10, one end thereof being detachable to enable the chute to be taken apart for transportation.

In order to reliably hold the floor-sections upon the cross-beams 3 4, I provide the retaining cleats or ribs 11, arranged to lie upon either side of said beams, and when the floor is placed thereon it will be securely, though detachably, held in position. In like manner I provide retaining-cleats 12 on the outer side of the sections 7 8 at a point thereon which will enable said cleats to lie upon either side of the standards 1 2, preventing any longitudinal movement of said sections and thus secure them in their operative places.

It will be seen from the foregoing description of my improved chute for the conveyance of stock from their pens to the vehicle into which they are to be placed that I have provided a chute of simple, cheap, and reliable construction to meet the ends above set forth, enabling all the parts thereof to be readily separated from their contiguous sections that they may be prepared for shipment in a small compass.

In order that the upper end of the chute may be elevated or lowered to compensate for the varying height of the vehicle with which it is coöperating for the loading of the stock, I arrange the adjusting mechanism set forth in Figs. 3, 4, and 5, which may be described as follows: The lower ends of the standards are preferably hollow, and within the hollow body thus formed I mount the reciprocating shaft 13, which is of a sufficient diameter to loosely fit within the housing thus provided. Upon the one side of the

tubular section 14 of the standards 2 I provide the slotted opening 15, and from said opening the lug 16, integrally formed upon the shaft 13, is designed to project. Upon either
 5 side of the tubular section 14, at points equidistant from the slotted opening 15, I arrange the series of fulcrum-points 17, disposed diametrically opposite each other. Designed to engage with the fulcrum-points and the
 10 projecting lug 16 is the operating-lever 18, with the bifurcated end 19 terminating in the hooks 20. Near the point of juncture of the arms 19 I arrange in the lower edge of the operating-handle a recess 21, adapted to
 15 form a retaining point or seat for the upper side of the lug 16. The shaft 16 is further provided with a series of transverse apertures 22, disposed at right angles to the lug 16, while the tubular section 14 is provided
 20 with apertures 23, diametrically opposite each other and designed to be brought into registration with one of the apertures 22. When such registration has been effected, the standard is held in an adjusted position by entering the retaining-pin 24 through the apertures 22 23.

In operation the standards 1 are adjusted by means of the construction above set forth in such a manner that the floor of the chute
 30 will be brought to the desired height, the operation being as follows: The bifurcated lever 18 is placed in position so that the hooked section 20 will engage with the fulcrum-points 17 upon either side of the tubular section 14 and the seat 21 will rest upon
 35 the upper side of the lug 16, when a downward pressure upon the lever will force the lug and its accompanying shaft downward, resulting in the corresponding elevation of
 40 the tubular section 14 until the apertures 22 23 are brought into registration with each other, when the adjustment thus effected may be secured by entering the retaining-pin 24 in position in said apertures. This operation may be repeated until the shaft 13 has
 45 been forced sufficiently out of its housing and the desired height for the chute attained.

It will be understood that the chute may

be used without the adjusting mechanism above described, or such mechanism may be
 50 adopted if deemed necessary. I therefore desire to reserve the right to employ the adjusting mechanism or dispense with it as I may deem best in practice.

Believing that the advantages, operation,
 55 and construction of my improved chute and adjusting mechanism therefor will be fully understood from the foregoing description, considered in connection with the accompanying drawings, further reference is deemed
 60 unnecessary.

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

1. A chute consisting of sides and a floor-
 65 way, telescopic tubes attached to one end of the chute, the inner tube having a lug and the outer tube having a slot and external pins and means engaging said lug and pins and means to secure the elevated tube in ad-
 70 justed position, as set forth.

2. The combination with a chute of tubular telescopic sections connected to the forward end thereof, the inner tube provided with a
 75 lug and the outer tube with a longitudinal slot in which the lug works, and means to elevate and hold the outer tube in place, as set forth.

3. The combination with a chute of an elevating mechanism consisting of a tubular
 80 housing provided with a longitudinal slotted opening; a shaft mounted within said housing and provided with a lug adapted to protrude through said slotted opening; fulcrum-points formed upon opposite sides of said
 85 housing and means for engaging said fulcrum-points and lug to the end that said shaft may be forced in and out of its housing, substantially as described and for the purpose
 90 set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JOS. W. MYERS.

Witnesses:

JASPER TROTTER,
 JANES UNDERHILL.