

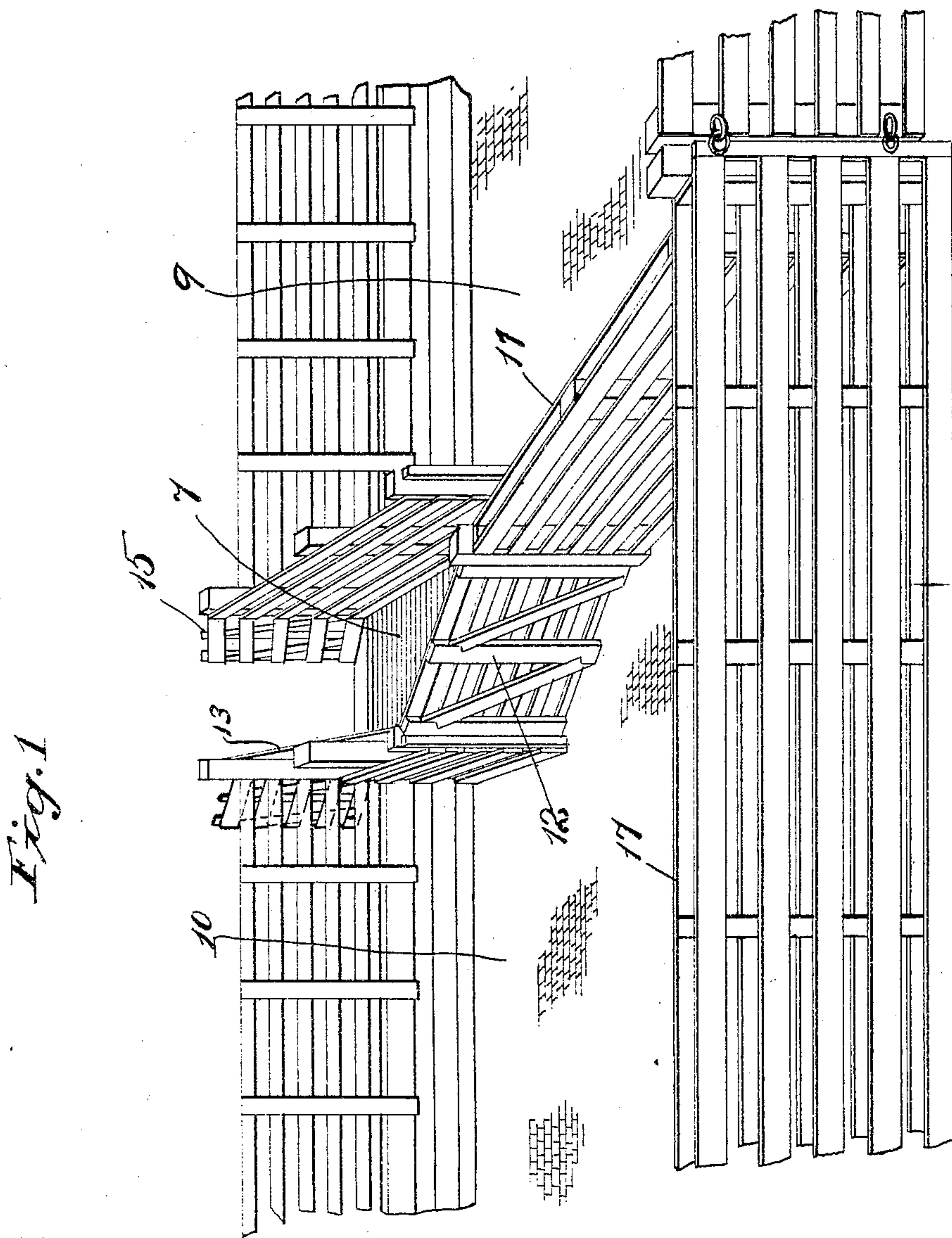
No. 779,658.

PATENTED JAN. 10, 1905.

A. G. LEONARD.
CHUTE PEN FOR STOCK YARDS.

APPLICATION FILED MAR. 4, 1904.

3 SHEETS—SHEET 1.



Witnesses:
J B Weir
Oliver L Plumtree

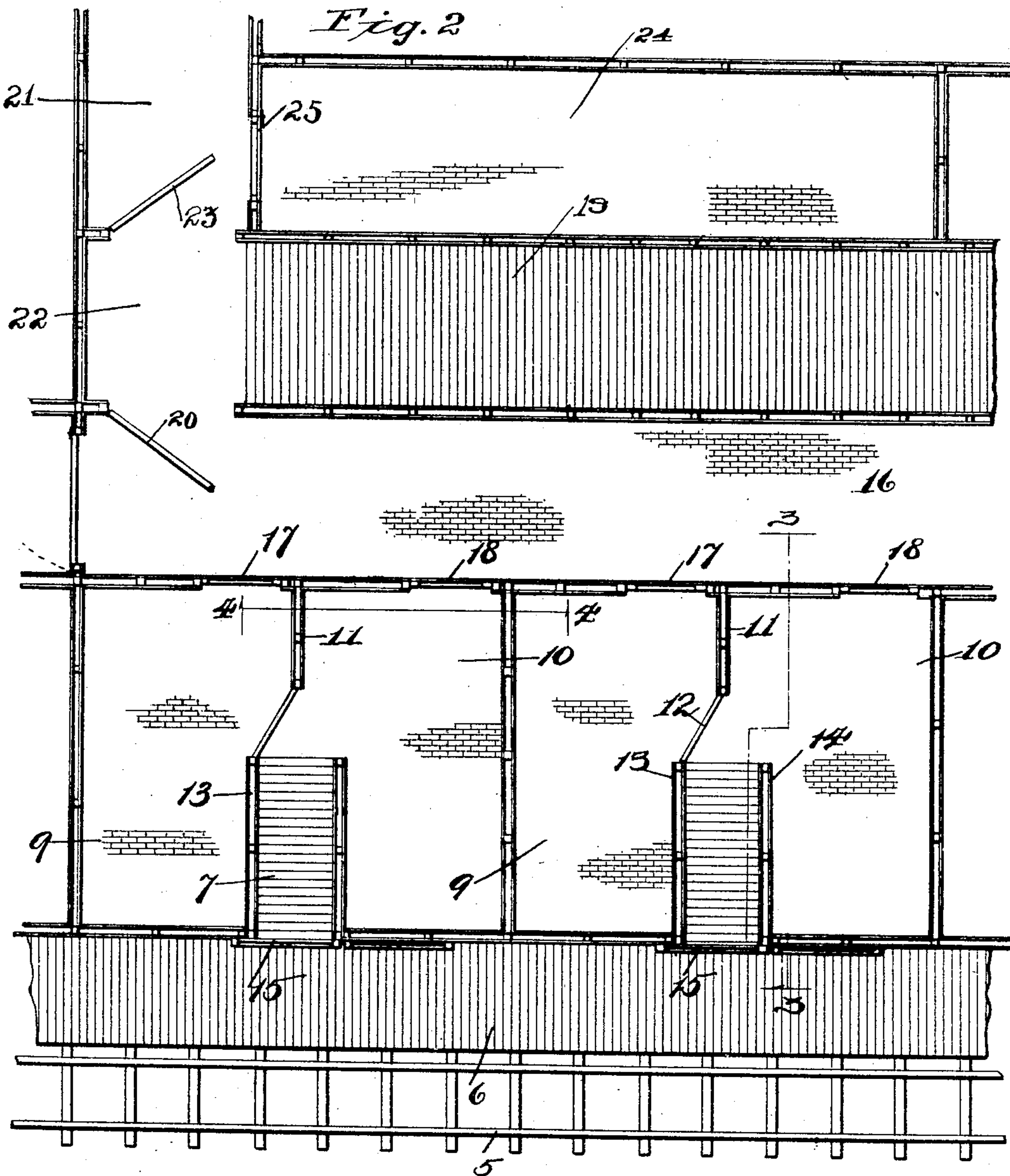
Inventor:
Arthur G. Leonard,
by Bond Adams Peirce & Jackson,
his Atty.

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3 SHEETS—SHEET 2.



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3 SHEETS—SHEET 3.

Fig. 3.

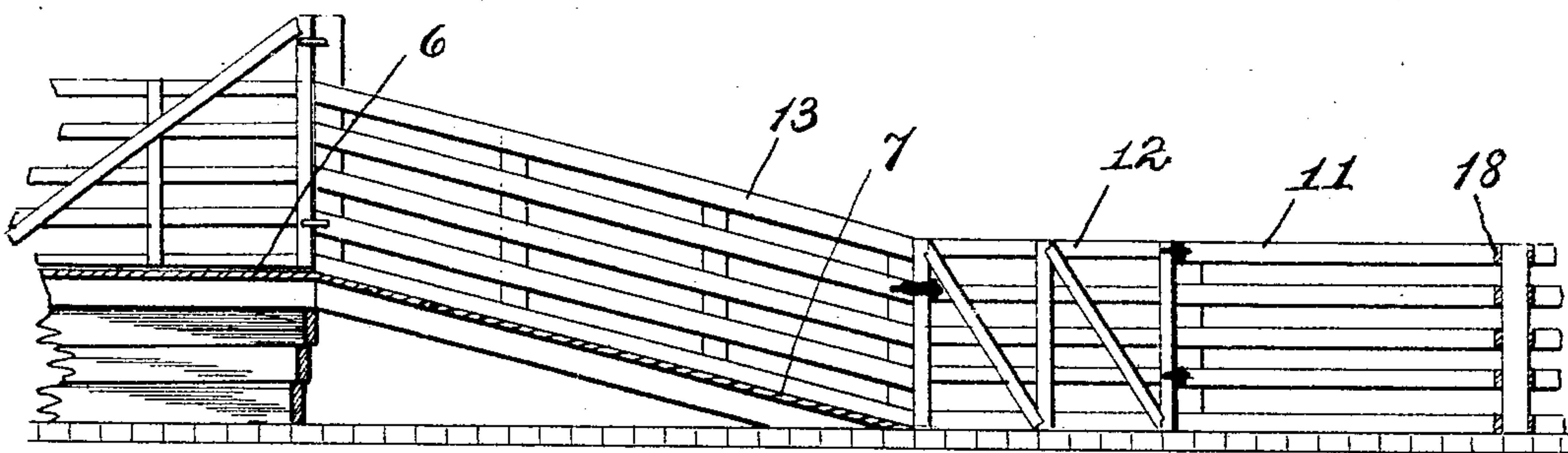
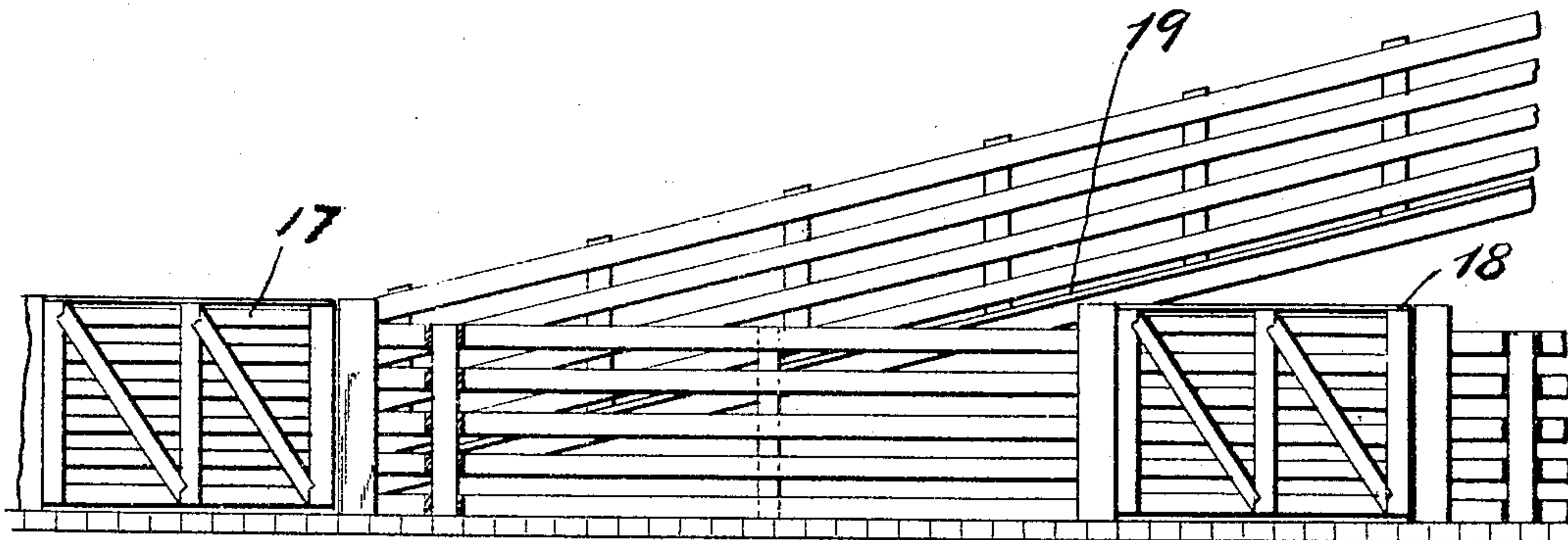


Fig. 4



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UNITED STATES PATENT OFFICE.

ARTHUR G. LEONARD, OF CHICAGO, ILLINOIS.

CHUTE-PEN FOR STOCK-YARDS.

SPECIFICATION forming part of Letters Patent No. 779,658, dated January 10, 1905.

Application filed March 4, 1904. Serial No. 196,626.

To all whom it may concern:

Be it known that I, ARTHUR G. LEONARD, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Chute-Pens for Stock-Yards, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to means for facilitating the handling of cattle and other live stock at live-stock markets and other shipping-points. It provides for an arrangement of unloading-chutes and chute-pens by which two unloading or chute pens are provided for each unloading-chute, said chute-pens being connected with the chute by a gate constructed and arranged to be used alternately to connect either chute-pen with the chute as connection may be required. I thus double the capacity of the unloading-platform, providing for its continuous use, since when the stock are unloaded from a given train the unloading of the next train may begin immediately, the stock from it being directed into the companion chute-pen, the stock from the first train being meanwhile removed at their leisure by the yarding gang. In short, the practical effect of my improved arrangement of chute-pens is to obviate such secondary delays both in the handling of trains and the handling of live stock, rendering both more elastic and independent, so that the unloading gang and the yarding gang may in large measure work independently of each other. Besides, space is economized and the business concentrated, so as to reduce to the minimum the loss from loss of time and shrinkage in the weights of animals.

My invention further provides for placing the chute-pens, as well as the chute-alleys, on the ground-level, thus avoiding the great expense of building unloading-platforms extensive enough to receive the chute-pens and chute-alleys, and in view of their being located on the ground-level it makes practicable the use of brick pavement for the chute pens and alleys, thereby making it much easier to keep the pens clean, as well as saving the great cost of building, frequent repairing, and rebuilding every few years of the wide raised plank platform, which according to the old

construction carried the chute-pens and chute-alley.

In the accompanying drawings, Figure 1 is a perspective view illustrating one of the chutes and portions of the communicating chute-pens, the unloading-platform being shown in the distance. Fig. 2 is a plan view illustrating the unloading-platform, the chutes, and chute-pens, the chute-alley, and the arrangement for directing the stock to the upper deck of double-deck stock-yards. Fig. 3 is a partial section on line 3 3 of Fig. 2, and Fig. 4 is a partial section on line 4 4 of Fig. 2.

Referring to the drawings for a detailed description of my improvements, 5 indicates the railway-track, and 6 the unloading-platform, which, as shown in Fig. 2, extends parallel with the track and, as hereinbefore suggested, is usually as long as the longest trains.

7 indicates chutes which communicate with the platform 6.

9 10 indicate adjacent chute-pens, which are arranged to communicate with the chute 7. As shown in Fig. 2, each of the chutes 7 is arranged centrally between the chute-pens 9 10 and terminates a short distance from a fence 11, which partly separates said pens. The fence 11 is arranged on the median line between said chute-pens and is provided with a gate 12, which is adapted to swing to one side or the other in such manner as to connect with either side of the chute 7.

13 14 indicate the sides of the chute 7.

In Fig. 2 the gate 12 is shown as being arranged to connect with the side 13, so as to direct the stock into chute-pen 10. By swinging the gate 12 to connect with side 14 of the chute the stock may be directed into pen 9. That end of each chute next to the platform 6 is also provided with a gate 15, which is adapted to swing across the platform 6 to direct the stock from the car into the different chutes. The arrangement of the different pairs of chute-pens is the same as that already described.

16 indicates the chute-alley, which is arranged back of the chute-pens and communicates therewith through gates 17 18, as shown in Fig. 2.

19 indicates an incline, which communicates

with the alley 16, being adapted to be separated therefrom by a gate 20, as shown in Fig. 2. 21 indicates a second alley, which communicates with the alley 16 through a passage 22, leading from the alley 16 opposite the lower end of the incline 19, as shown in Fig. 2. A gate 23 is provided for separating the alley 21 from the passage 22. Said gate is closed when stock are to be driven up the incline 19.

24 indicates a storage or sale pen, which communicates with the alley 21, a gate 25 being provided between said pen and said alley.

All the chute-pens and the two alleys above described are arranged on the ground-level, while the unloading-platform 6 is placed on a level with the car-floors.

In use the train is pulled up in front of the platform 6 and the different gates 12 are swung into the same position—as, for example, so as to connect with the sides 13 of the different chutes. The stock are then discharged into the different pens 10. As soon as the stock are discharged the empty train pulls out and a loaded train takes its place. In the meanwhile the yarding men take up the removal of the unloaded stock through the alley, the stock passing from the pens 10 through the gates 18. Immediately after the stock enter the pens 10 the gates 12 are swung into connection with the sides 14 of the chutes, thereby connecting the chutes with the pens 9, so that when the next train begins to discharge the stock will pass into the pens 9 without interfering with any stock still remaining in pens 10. Thus as much time may be consumed in removing the stock from any series of pens as is required to discharge a loaded train into the other series of pens without causing delay. The operation of handling, therefore, is made practically continuous. The result is that, in effect, without at all increasing the length of the unloading-platform, by my invention I provide double the unloading capacity—in other words, according to the old system two miles of unloading-platform and chute-pens would be required to do the work of one mile of unloading-platform and chute-pens arranged according to my invention. I thus greatly reduce the space required for unloading, as well as secure the other advantages hereinbefore enumerated.

While my improved system of chute-pens is designed primarily for unloading stock from railway-cars, it may also be used for loading such cars, in which case the operation will be the reverse of that described.

I wish it to be understood that my invention is not restricted to the specific details of the construction described, except in so far as I have particularly claimed them.

That which I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination of a pair of chute-pens,

an unloading-platform extending longitudinally of one side thereof, a chute communicating with said platform and with both of said chute-pens, and means for directing stock from said chute into either of said chute-pens, substantially as described.

2. The combination of a pair of chute-pens, an unloading-platform extending longitudinally of one side thereof, a chute communicating with said platform and with both of said chute-pens, means for directing stock from said chute into either of said chute-pens, and a gate on said platform for closing said chute, substantially as described.

3. The combination of a series of chute-pens, an alley extending longitudinally at one side thereof, each of said chute-pens having a gate communicating with said alley, a series of chutes each communicating with a plurality of said chute-pens, and means for directing stock from said chutes into either of the pens communicating therewith, substantially as described.

4. The combination of an unloading-platform, an alley extending longitudinally at one side thereof, a series of chute-pens between said alley and said platform, each of said chute-pens having a gate communicating with said alley, and means for admitting stock from said platform to said chute-pens, substantially as described.

5. The combination of an unloading-platform, an alley extending longitudinally thereof, a series of chute-pens between said alley and said platform, each of said chute-pens having a gate communicating with said alley, a series of chutes each communicating with a plurality of said chute-pens, and means for directing stock from said chutes into any of the pens communicating therewith, substantially as described.

6. The combination of an unloading-platform, an alley extending longitudinally thereof, a series of chute-pens between said alley and said platform, each of said chute-pens having a gate communicating with said alley, a series of chutes, each communicating with a plurality of said chute-pens, means for directing stock from said chutes into any of the pens communicating therewith, a second alley communicating with said first-mentioned alley, an incline between said alleys and communicating therewith, and gates between said alleys and said incline, substantially as described.

7. A system of unloading-pens, comprising an unloading-platform, a plurality of groups of pens arranged longitudinally of said platform and adjacent thereto, the pens of each group being arranged to be used alternately for receiving stock unloaded onto said platform, each pen being provided with means for discharging stock contained in it, while another pen of the same group is receiving stock, substantially as described.

8. A system of unloading-pens, comprising
an unloading-platform, a plurality of pens ar-
ranged longitudinally thereof and adjacent
thereto, said pens being arranged to be used
5 alternately for receiving stock unloaded onto
said platform, each pen being provided with
means for discharging stock contained in it
while another adjacent pen is receiving stock,
substantially as described.

10 9. A system of unloading-pens, comprising

an alley, a plurality of pens longitudinally
arranged at one side thereof, each pen being
provided with means for discharging stock
contained therein into said alley, and means
for directing stock alternately into adjacent 15
pens, substantially as described.

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