

No. 607,775.

Patented July 19, 1898.

J. C. STINSON.  
CATTLE PUMP.

(Application filed June 26, 1897.)

(No Model.)

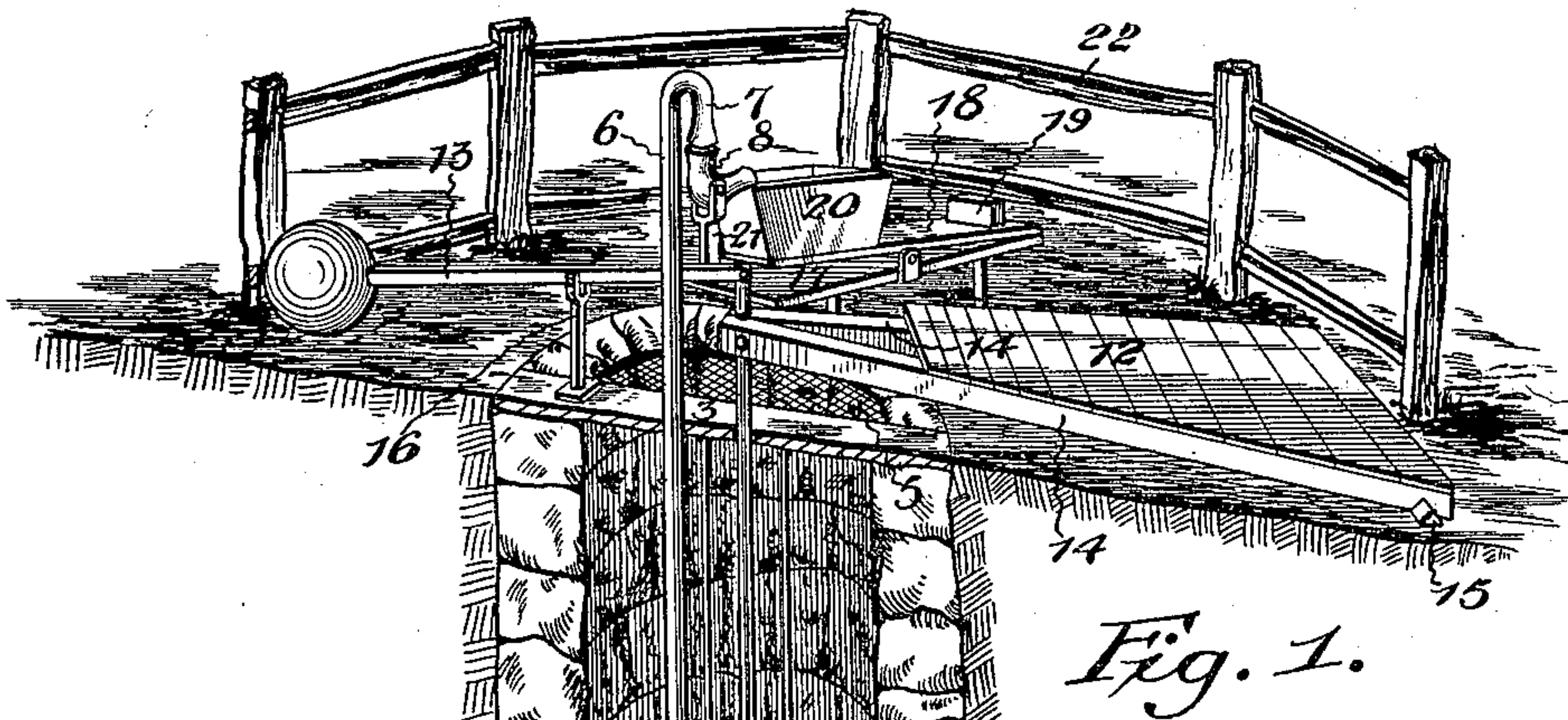
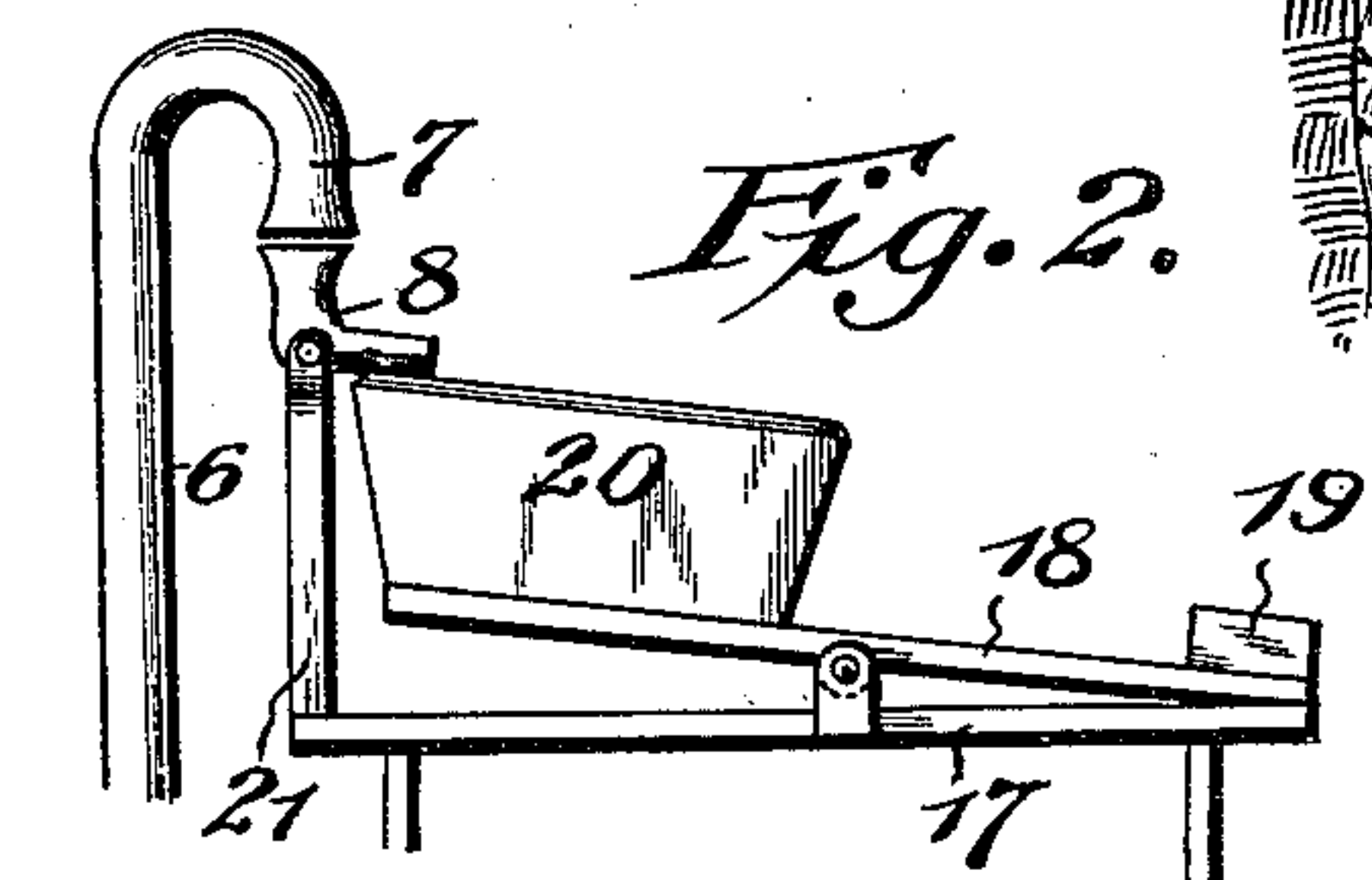
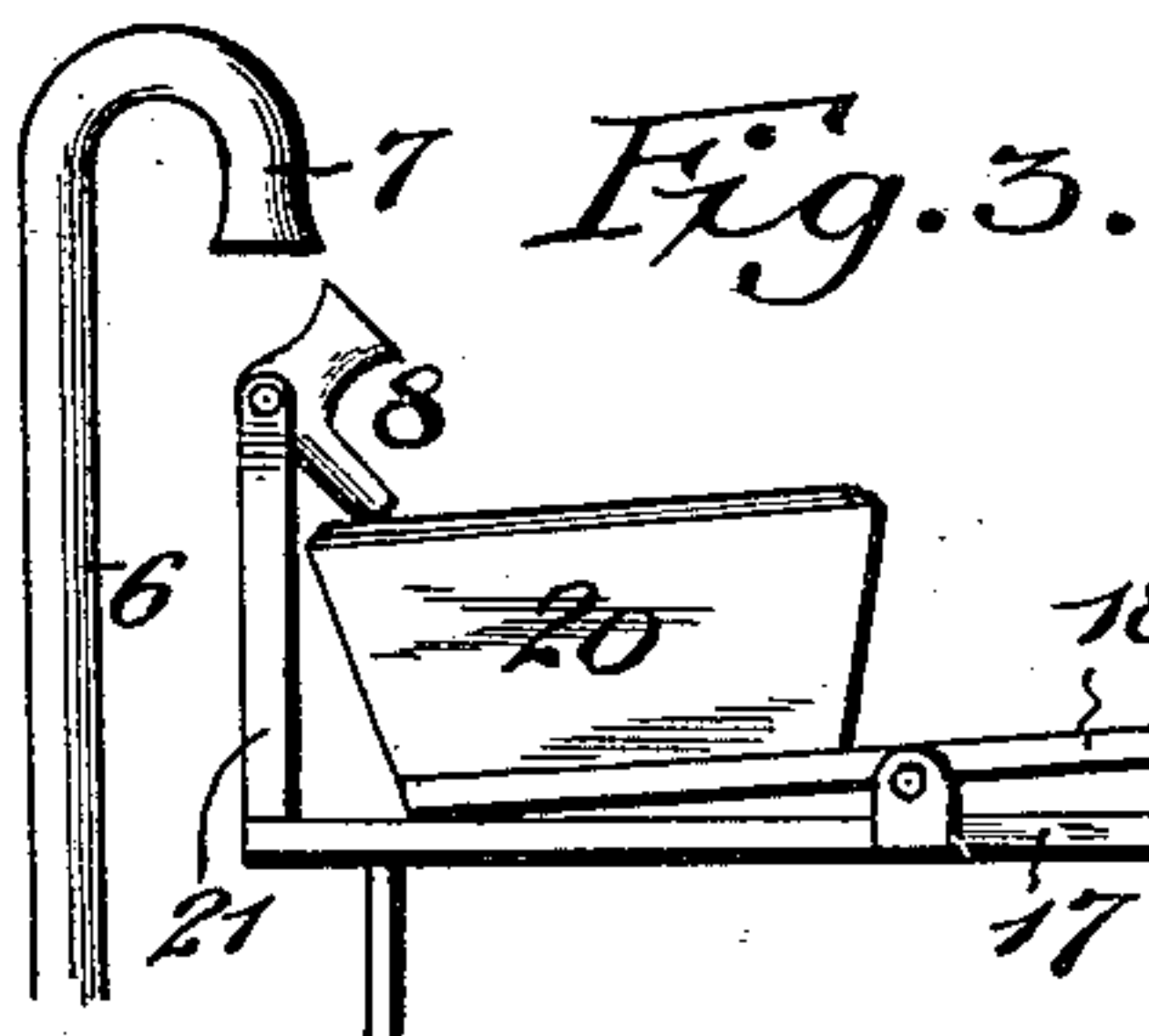


Fig. 1.



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# UNITED STATES PATENT OFFICE.

JAMES CARY STINSON, OF CENTRE POINT, TENNESSEE.

## CATTLE-PUMP.

SPECIFICATION forming part of Letters Patent No. 607,775, dated July 19, 1898.

Application filed June 26, 1897. Serial No. 642,451. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES CARY STINSON, of Centre Point, in the county of Chester and State of Tennessee, have invented certain new and useful Improvements in Cattle-Pumps; 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.

This invention relates to pumps which are operated by the weight of cattle when drinking and is designed to prevent the fouling of the water and the overflow of the trough and to provide a simple and effective construction positive in action and not liable to derangement.

For a full understanding of the merits and advantages of the invention reference is to be had to the accompanying drawings and the following description.

The improvement is susceptible of various changes in the form, proportion, and the minor details of construction without departing from the principle or sacrificing any of the advantages thereof, and to a full disclosure of the invention an adaptation thereof is shown in the accompanying drawings, in which—

Figure 1 is a perspective view showing the well and pump-barrel in section. Fig. 2 is a detail view in elevation, showing the relation of the trough and nozzle when the latter is discharging water into the trough. Fig. 3 is a view of the same parts shown in Fig. 2, illustrating their relation when the trough has settled and the nozzle is out of register with the spout of the discharge-pipe.

Corresponding and like parts are referred to in the following description and indicated in the views of the drawings by the same reference characters.

The pump and the parts coöperating therewith are shown in connection with a well 1 of ordinary construction. The pump-barrel 2 is suspended in the well from a cross-timber 3 by means of rods 4 and is closed at its upper end by means of a reticulated plate or screen 5, which prevents matter from entering the pump and obstructing the working thereof. The discharge-pipe 6 connects with the lower end of the pump-barrel and is provided at its upper end with a spout 7, which curves

downwardly at its discharge end, so as to deliver the stream of water to the vertical member or branch of a pivotally-supported nozzle 8 of elbow shape. The pump-barrel is provided at its lower end with a foot or check valve 9 of ordinary construction, and a valve-plunger 10 operates in the barrel and has its rod 11 connected with a tilting platform 12 and with a counterbalanced lever 13, the latter serving to return the plunger 10 and platform 12 to a normal or working position after the weight of the cattle has been removed therefrom.

The platform 12 may be of desired construction, and consists of inwardly-convergent bars 14 and transverse strips secured to said bars, the latter having their inner ends pivotally connected to the upper end portions of the rod 11 and their outer ends mounted upon a fulcrum 15. The lever 13 is fulcrumed intermediate of its ends to a bracket 16, secured to the cross-bar 3, and is weighted at its outer end and has its inner end pivotally connected with the rod 11.

A platform 18 is pivotally supported at an intermediate point to a base 17 and is supplied with a weight 19 at one end and a trough 20 at its opposite end, the latter being counterbalanced and normally held elevated by the weight 19 when empty or when the water therein has fallen below a predetermined level. An upright 21 rises from the base 17 and has the elbow-shaped nozzle 8 pivotally connected therewith at the elbow. The parts are disposed so that when the trough 20 is elevated the vertical member of the nozzle 8 is in register with the discharge end of the spout 7, so as to receive the stream of water therefrom and direct it into the trough 20. The upper end of the nozzle 8 and the lower end of the spout 7 flares, thereby preventing the escape of water when the corresponding parts of the spout and nozzle are in coincident relation. The horizontal member of the nozzle rests upon the inner side or wall of the trough and projects thereover, so as to discharge the water into the trough. The nozzle is supported in such a manner as to be counterbalanced by its horizontal portion, which latter rests upon the inner wall of the trough and moves therewith, so as to bring the vertical member of



the nozzle into or out of register with the spout. When the trough 20 is empty or the water therein has fallen below a given level, the superior force of the weight 19 will pre-  
 5 dominate and counterbalance the trough and elevate it into the position shown in Figs. 1 and 2, thereby bringing the vertical member of the nozzle in register with the spout. After the trough has received the desired  
 10 amount of water it will overcome the force of the weight 19 and settle or lower, thereby permitting the vertical member of the nozzle 8 to leave the discharge end of the spout 7, whereby the excess of water will be dis-  
 15 charged into the well without causing the trough to overflow and wash filth and dirt into the well and foul the water thereof.

When an animal desires to drink, it approaches the trough 20, and in so doing  
 20 passes upon the platform 12 and lowers its inner end, thereby depressing the plunger and expelling the water from the pump-barrel and forcing it through the discharge-pipe and into the trough through the spout and nozzle.  
 25 When the trough is supplied with the required amount of water, it will gravitate and cause the nozzle to move away from the spout and permit any surplus water to pass back into the well. When the animal is through  
 30 drinking and leaves the platform, the latter and the plunger connected therewith are returned to a normal or operative position by means of the counterbalanced or weighted lever 13 in the manner set forth, thereby re-  
 35 setting the pump to be again operated by the next animal desiring to quench its thirst. In order to insure the animal mounting the plat-  
 40 form and in order to protect the mouth of the well, the latter is inclosed upon three of its sides by a fence, as shown at 22 in Fig. 1.

Having thus described the invention, what is claimed as new, and desired to be secured by Letters Patent, is—

1. The combination with a pump and a dis-  
 45 charge-pipe connected with the pump and having a spout, of an elbow-shaped nozzle pivotally supported and adapted to have its vertical member register with the discharge end of the said spout, and a counterbalanced  
 50 trough controlled in its vertical movements by the change of level of the water contained therein and adapted to rock the elbow-nozzle to bring its vertical member into and out of register with the aforesaid spout, substan-  
 55 tially as set forth.

2. The combination with a pump, a discharge-pipe connected with the pump and having a spout, and a counterbalanced plat-

form having connection with the pump for op-  
 erating it when a weight is received upon such  
 platform, of an elbow-shaped nozzle pivot- 60  
 ally supported and adapted to have its ver-  
 tical member register with the spout, a sec-  
 ond counterbalanced platform, and a trough  
 mounted upon an end portion of the last-men- 65  
 tioned platform and controlled in its vertical  
 movements by the change of level of the wa-  
 ter contained therein and adapted to rock the  
 elbow-shaped nozzle to bring its vertical mem-  
 ber into or out of register with the spout, sub- 70  
 stantially as set forth.

3. The combination with a pump, a dis-  
 charge-pipe connected with the pump and  
 having a spout, and a counterbalanced plat- 75  
 form having connection with the pump for op-  
 erating it when a weight is received thereon,  
 of a second counterbalanced platform sup-  
 porting a trough at one end and controlled  
 in its movements by the change of level of 80  
 water in the trough, and an elbow-shaped  
 nozzle having its vertical member adapted to  
 register with the spout and terminating in a  
 flaring end, and having its horizontal mem-  
 ber in engagement with the aforesaid trough  
 and controlled in its movements thereby to 85  
 bring the vertical member of the nozzle into  
 and out of register with the aforesaid spout,  
 substantially as described.

4. In combination, a pump, a discharge-  
 pipe having connection with the pump and 90  
 provided with a spout, a platform pivotally  
 supported at its outer end and having con-  
 nection at its inner end with the pump-rod,  
 a counterbalanced lever applied to the pump-  
 rod for returning it and the platform to a nor- 95  
 mal position, a base, a platform pivoted in-  
 termediate of its ends to the base and provided  
 at one end with a weight and at its opposite  
 end with a trough, an upright applied to said  
 base, and an elbow-shaped nozzle having piv- 100  
 otal connection with the said upright and  
 adapted to have its vertical member register  
 with the spout of the discharge-pipe and hav-  
 ing its horizontal member resting upon the  
 trough and controlled in its vertical move- 105  
 ments thereby and by the change of level of  
 the water contained in the trough, substan-  
 tially as set forth.

In testimony whereof I have signed this  
 specification in the presence of two subscrib- 110  
 ing witnesses.

JAMES CARY STINSON.

Witnesses:

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 E. F. BOSWELL.