

F. N. WHITESELL.

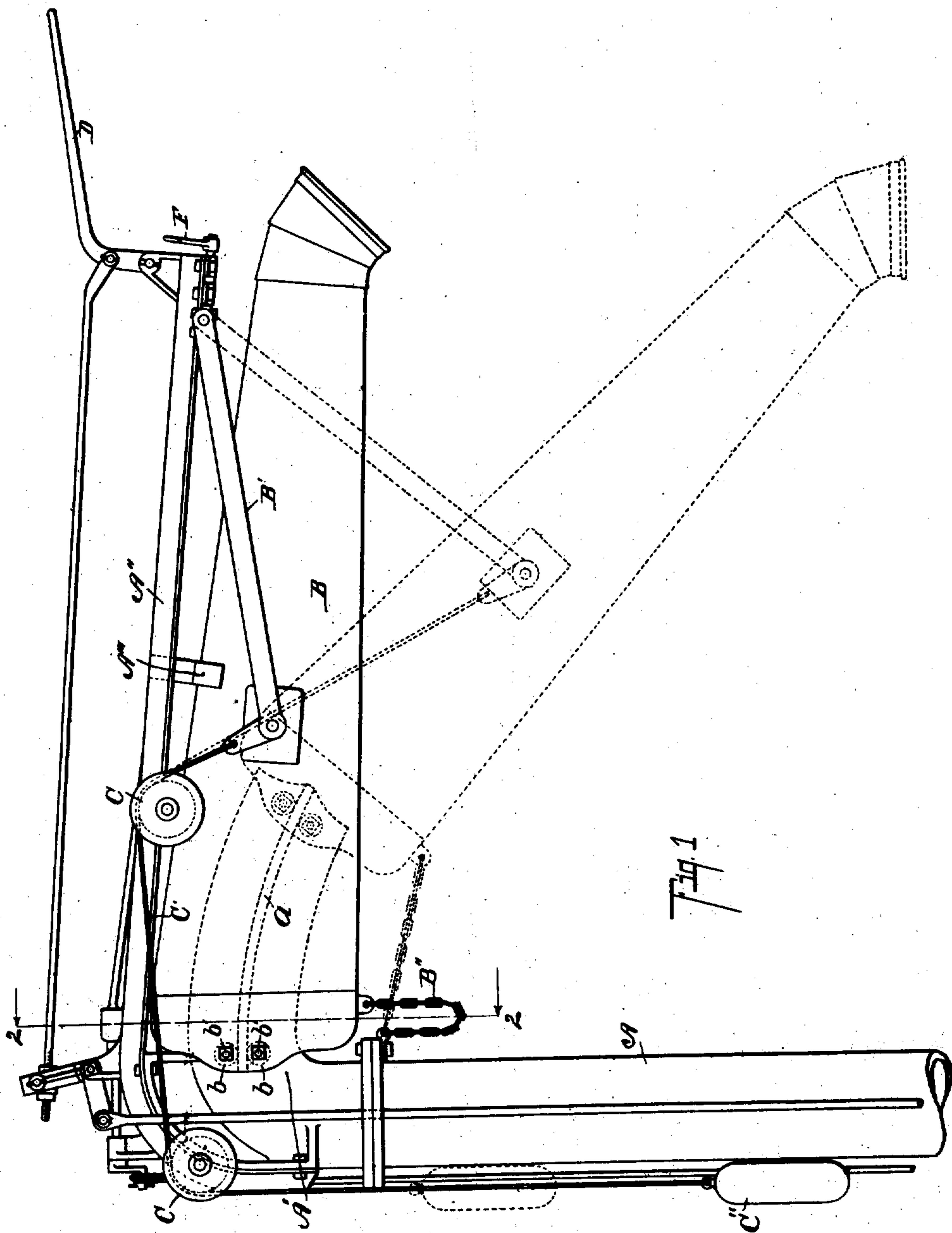
STAND PIPE.

APPLICATION FILED JUNE 11, 1908.

900,141.

Patented Oct. 6, 1908.

2 SHEETS—SHEET 1.



Witnesses:

Luella G. Greenfield

Clara E. Braden

Inventor,

Fredrick N. Whitesell

By *Chappell & Cash*
Att'ys

F. N. WHITESELL.

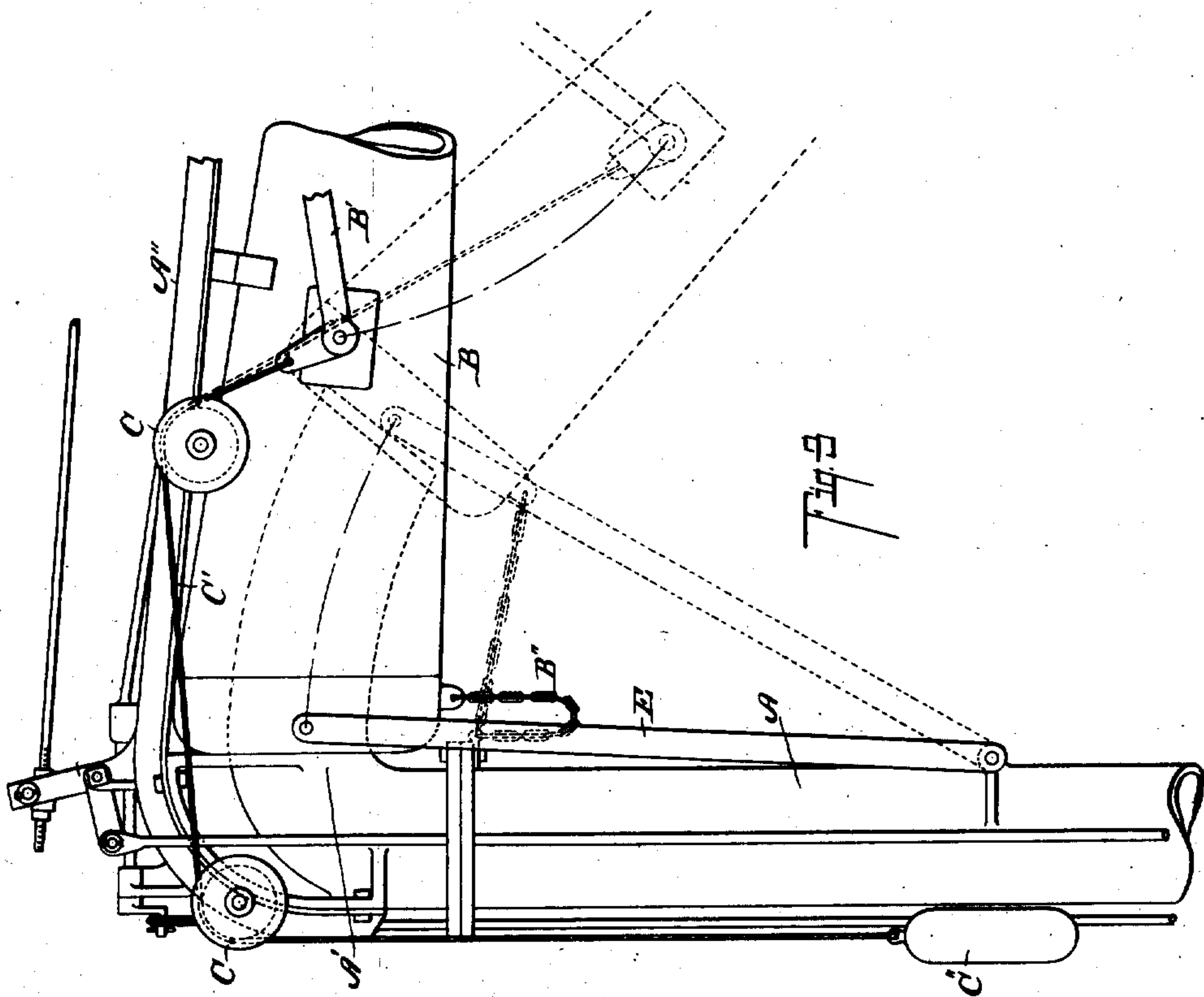
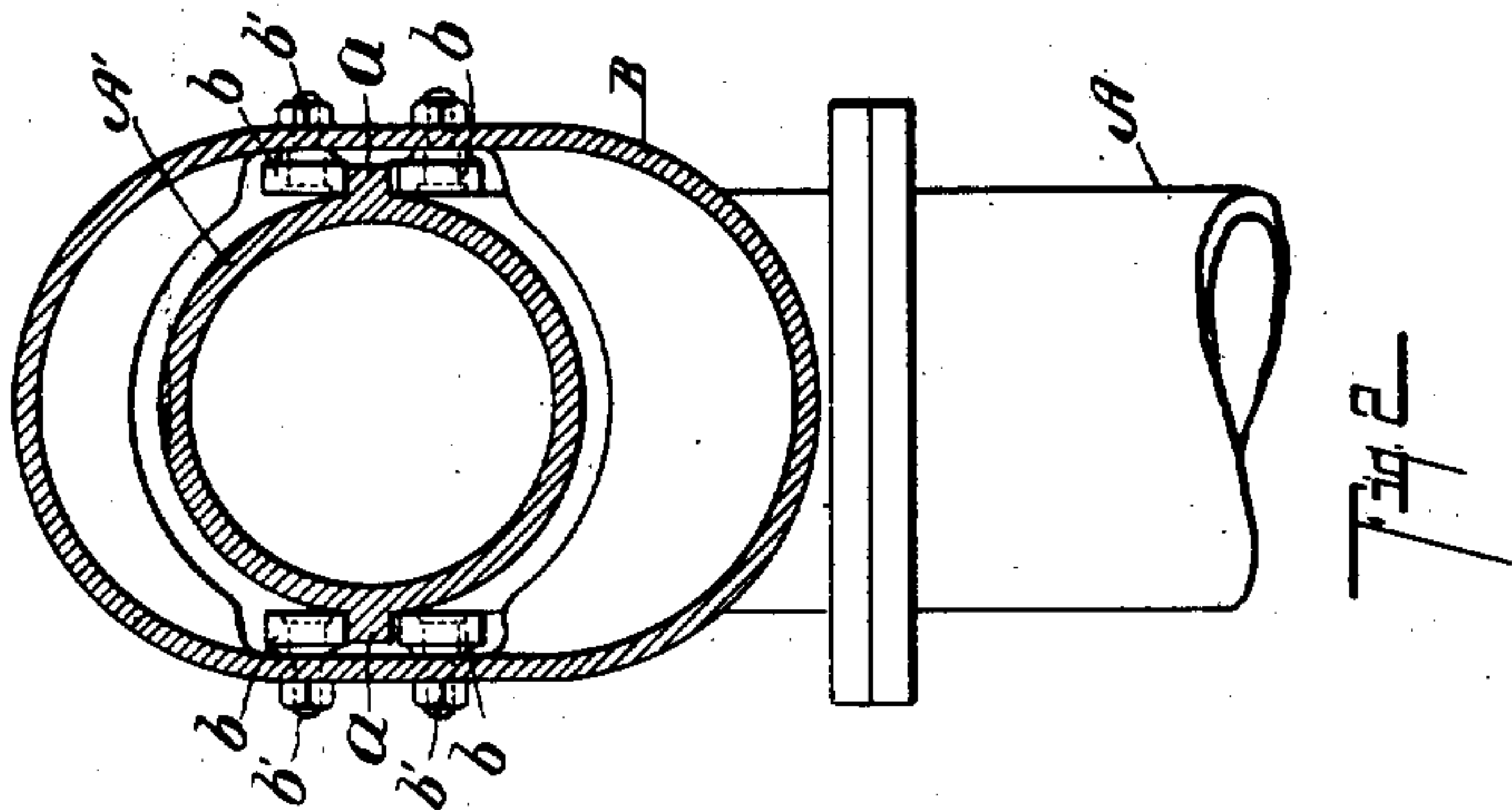
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2 SHEETS—SHEET 2.



Witnesses:

Luke S. Greenfield
Clara E. Braden

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UNITED STATES PATENT OFFICE.

FREDRICK N. WHITESELL, OF THREE RIVERS, MICHIGAN, ASSIGNOR TO THE SHEFFIELD CAR COMPANY, OF THREE RIVERS, MICHIGAN.

STAND-PIPE.

No. 900,141.

Specification of Letters Patent.

Patented Oct. 6, 1908.

Application filed June 11, 1906. Serial No. 321,177.

To all whom it may concern:

Be it known that I, FREDRICK N. WHITESELL, a citizen of the United States, residing at Three Rivers, county of St. Joseph, State of Michigan, have invented certain new and useful Improvements in Stand-Pipes, of which the following is a specification.

This invention relates to improvements in stand pipes or water columns.

10 The objects of this invention are: First, to provide an improved stand pipe or water column which may be raised or lowered to accommodate locomotive tenders of varying heights, and also so that it may be elevated
15 out of the way, the discharge end of the delivery spout remaining in substantially the same vertical plane, throughout its adjustment. Second, to provide an improved water column or locomotive stand pipe
20 which embodies the above advantages, and which is very simple in structure, easy to operate, and not likely to get out of repair.

Further objects, and objects relating to structural detail will definitely appear from
25 the detail description to follow.

I accomplish the objects of my invention by the devices and means described in the following specification.

30 The invention is clearly defined and pointed out in the claims.

A structure embodying the features of my invention is clearly illustrated in the accompanying drawing forming a part of this specification, in which,

35 Figure 1 is a detail side elevation of my improved stand pipe or water column. Fig. 2 is a detail vertical section taken on a line corresponding to line 2—2 of Fig. 1, showing structural details. Fig. 3 is a detail side
40 elevation of a modified construction of my improved stand pipe or water column, the track *a* for the discharge spout being omitted and the link *E* being provided for guiding and supporting the inner end of the
45 spout.

In the drawing similar letters of reference refer to similar parts throughout the several views.

Referring to the drawing, *A* is the vertical
50 upright portion of the stand pipe, which is provided at its upper end with a laterally turned discharge nozzle *A'*. The delivery

spout *B* is telescopically arranged over this discharge nozzle as clearly appears in the drawing. The inner end of the discharge
55 spout is, as illustrated, considerably larger in diameter than the discharge nozzle in the vertical direction so that it may be swung freely up and down thereon. On the sides of the discharge nozzle *A'* are formed tracks
60 or ways *a*, the same being curved downwardly; see Figs. 1 and 2.

Arranged within the discharge spout *B* are rollers *b* adapted to engage this track *a*, whereby the inner end of the discharge
65 spout is supported and guided. The rollers *b* are preferably secured to the discharge spout by suitable bolts as *b'*, which serve as journals therefor. The rollers *b* are arranged in pairs and engage both sides of
70 the track. The discharge spout *B* is further supported and guided by the link *B'*, which is pivoted thereto at a point preferably near its center of gravity and to the bracket-like arm *A''*, which projects outwardly from
75 the vertical portion of the stand pipe. The bracket arm *A''* projects outwardly above the discharge spout and the link *B'* is pivoted to the outer end thereof, the lower end of the link being directed inwardly. By thus
80 arranging the supports for the discharge spout they coact so that the spout is positively guided in its movement and the outer end caused to swing in a substantially vertical plane. The outward and downward
85 movement of the discharge pipe is limited by the chain *B''*, which is connected to the inner end thereof and to the vertical pipe *A*. The counterbalance *C''* is preferably provided for the discharge spout, the same being
90 connected thereto by the cable *C'*, which is arranged over the pulleys *C*, one of which is mounted upon the bracket *A''* above the spout, and the other upon the vertical pipe
95 *A* at the rear.

On the under side of the arm *A''* is a rest *A'''* against which the delivery spout *B* rests when in its normal or upper position. With the parts thus arranged, the discharge
100 spout may be very easily adjusted to bring the same into proper position to the inlet openings of the locomotive tenders and may be raised out of the way of passing locomotives. The discharge end of the spout is ar-

ranged in substantially the same vertical plane throughout its adjustment so that it properly registers with the inlet of the tank.

In the modified construction shown in Fig. 3, the guide link E is pivoted to the discharge spout B at its inner end and to the vertical pipe A. This serves to guide the inner end of the discharge spout, causing it to swing in the arc of a circle as the spout is adjusted. For manipulating the valves of the stand pipe or water column, levers D and F are provided. As these features form no part of this invention, they are not described in detail herein.

I have illustrated and described my improved water column or stand pipe in detail in the form preferred by me, although I am aware that it is capable of considerable variation in structural detail without departing from my invention.

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

1. In a water column or stand pipe the combination of a vertical pipe; a laterally projecting discharge nozzle therefor; a discharge spout telescopically arranged over said discharge nozzle; downwardly curved tracks or ways on the sides of said discharge nozzle; rollers on said discharge spout arranged in pairs to engage the said tracks or ways whereby the inner end of said discharge spout is adjustably supported and guided; an arm projecting outwardly over said discharge spout; a link pivoted thereto and to said discharge spout said link being connected to said discharge spout at substantially the center of gravity thereof; a counterweight for said discharge spout; a cable connected thereto and to said discharge spout at substantially its center of gravity; guide pulleys for said cable, one of which is arranged on said arm above said discharge spout and the other to the rear thereof; a rest on said arm for said spout when in its normal or upper position; and a chain connected to the vertical pipe and the inner end of the discharge spout to limit its outward movement, for the purpose specified.

2. In a water column or stand pipe the combination of a vertical pipe; a laterally projecting discharge nozzle therefor; a discharge spout telescopically arranged over said discharge nozzle; downwardly curved tracks or ways on the sides of said discharge nozzle; rollers on said discharge spout arranged in pairs to engage the said tracks or ways whereby the inner end of said discharge spout is adjustably supported and guided; an arm projecting outwardly over said discharge spout; a link pivoted thereto and to said discharge spout; a counterweight for said discharge spout; a cable connected thereto and to said discharge spout; a rest

on said arm for said spout when in its normal or upper position; and a chain connected to the vertical pipe and the inner end of the discharge pipe to limit its outward movement, for the purpose specified.

3. In a water column or stand pipe the combination of a vertical pipe; a laterally projecting discharge nozzle therefor; a discharge spout telescopically arranged over said discharge nozzle; downwardly curved tracks or ways on the sides of said discharge nozzle; rollers on said discharge spout arranged in pairs to engage the said tracks or ways whereby the inner end of said discharge spout is adjustably supported and guided; an arm projecting outwardly over said discharge spout; a link pivoted thereto and to said discharge spout said link being connected to said discharge spout at substantially the center of gravity thereof; a counterweight for said discharge spout; a cable connected thereto and to said discharge spout at substantially its center of gravity; guide pulleys for said cable, one of which is arranged on said arm above said discharge spout and the other end to the rear thereof, for the purpose specified.

4. In a water column or stand pipe the combination of a vertical pipe; a laterally projecting discharge nozzle therefor; a discharge spout telescopically arranged over said discharge nozzle; downwardly curved tracks or ways on the sides of said discharge nozzle; rollers on said discharge spout arranged in pairs to engage the said tracks or ways whereby the inner end of said discharge spout is adjustably supported and guided; an arm projecting outwardly over said discharge spout; a link connected to said discharge spout; a counterweight for said discharge spout; a cable connected thereto and to said discharge spout; for the purpose specified.

5. In a water column or stand pipe, the combination of a vertical pipe; a laterally projecting discharge nozzle therefor; a discharge spout telescopically arranged over said discharge nozzle; means for supporting and guiding the inner end of said discharge spout whereby it may be telescopically adjusted over said nozzle; an arm projecting outwardly over said discharge spout; a link pivoted to said arm and arranged with its lower end directed inwardly and pivotally connected to said spout in front of said supporting and guiding means for the inner end thereof whereby said spout is positively guided in its movement and its outer end caused to swing in a substantially vertical plane; a counterweight for said discharge spout; a cable connected thereto and to said discharge spout; guide pulleys for said cable, one of which is arranged on said arm above said discharge spout and the other to

the rear thereof; a rest on said arm for said spout when in its normal or upper position; and a chain connected to the vertical pipe and the inner end of the discharge spout to limit its outward movement, for the purpose specified.

6. In a water column or stand pipe, the combination of a vertical pipe; a laterally projecting discharge nozzle therefor; a discharge spout telescopically arranged over said discharge nozzle; means for supporting and guiding the inner end of said discharge spout whereby it may be telescopically adjusted over said nozzle; an arm projecting outwardly over said discharge spout; a link pivoted to said arm and arranged with its lower end directed inwardly and pivotally connected to said spout in front of the said supporting and guiding means for the inner end thereof whereby said spout is positively guided in its movement and its outer end caused to swing in a substantially vertical plane; a counterweight for said discharge spout; a cable connected thereto and to said discharge spout; guide pulleys for said cable, one of which is arranged on said arm above said discharge spout and the other to the rear thereof; a rest on said arm for said spout when in its normal or upper position, for the purpose specified.

7. In a water column or stand pipe, the combination of a vertical pipe; a laterally projecting discharge nozzle therefor; a discharge spout telescopically adjusted over said discharge nozzle; means for supporting and guiding the inner end of said discharge spout whereby it may be telescopically arranged over said discharge nozzle; an arm projecting outwardly over said discharge spout; a link pivoted to said arm and arranged with its lower end directed inwardly and pivotally connected to said spout in front of said supporting and guiding means for the inner end thereof whereby said spout is positively guided in its movement and its outer end caused to swing in a substantially vertical plane; a counterweight for said discharge spout; a cable connected thereto and to said discharge spout; guide pulleys for said cable, one of which is arranged on said arm above said discharge spout and the other to the rear thereof, for the purpose specified.

8. In a water column or stand pipe, the combination of a vertical pipe; a laterally projecting discharge nozzle therefor; a discharge spout telescopically arranged over said discharge nozzle; means for supporting and guiding the inner end of said discharge spout whereby it may be telescopically adjusted over said discharge nozzle; an arm projecting outwardly over said discharge spout; a link pivoted to said arm and arranged with its lower end directed inwardly

and pivotally connected to said spout in front of said supporting and guiding means for the inner end thereof whereby said spout is positively guided in its movement and its outer end caused to swing in a substantially vertical plane; a rest on said arm for said spout when in its normal or upper position, and a chain connected to the vertical pipe and the inner end of the discharge spout to limit its outward movement, for the purpose specified.

9. In a water column or stand pipe, the combination of a vertical pipe; a laterally projecting discharge nozzle therefor; a discharge spout telescopically arranged over said discharge nozzle; means for supporting and guiding the inner end of said discharge spout whereby it may be telescopically adjusted over said nozzle; an arm projecting outwardly over said discharge spout; a link pivoted to said arm and arranged with its lower end directed inwardly and pivotally connected to said spout in front of said supporting and guiding means for the inner end thereof whereby said spout is positively guided in its movement and its outer end caused to swing in a substantially vertical plane; a rest on said arm for said spout when in its normal or upper position, for the purpose specified.

10. In a water column or stand pipe, the combination of a vertical pipe; a laterally projecting discharge nozzle therefor; a discharge spout telescopically arranged over said discharge nozzle; means for supporting and guiding the inner end of said discharge spout whereby it may be telescopically adjusted over said nozzle; an arm projecting outwardly over said discharge spout; a link pivoted to said arm and arranged with its lower end directed inwardly and pivotally connected to said spout in front of said supporting and guiding means for the inner end thereof whereby said spout is positively guided in its movement and its outer end caused to swing in a substantially vertical plane; a counterweight for said discharge spout; a cable connected thereto and to said discharge spout; guide pulleys for said cable, one of which is arranged on said arm above said discharge spout and the other to the rear thereof; and a chain connected to the vertical pipe and the inner end of the discharge spout to limit its outward movement, for the purpose specified.

11. In a water column or stand pipe, the combination of a vertical pipe; a laterally projecting discharge nozzle therefor; a discharge spout telescopically arranged over said discharge nozzle; means for supporting and guiding the inner end of said discharge spout whereby it may be telescopically adjusted over said discharge nozzle; an arm projecting outwardly over said discharge

spout; a link pivoted to said arm and arranged with its lower end directed inwardly and pivotally connected to said spout in front of said supporting and guiding means for the inner end thereof whereby said spout is positively guided in its movement and its outer end caused to swing in a substantially vertical plane, for the purpose specified.

In witness whereof, I have hereunto set my hand and seal in the presence of two witnesses. 10

FREDRICK N. WHITESELL. [L. S.]

Witnesses:

M. J. HUSS,
R. B. LINSLEY.