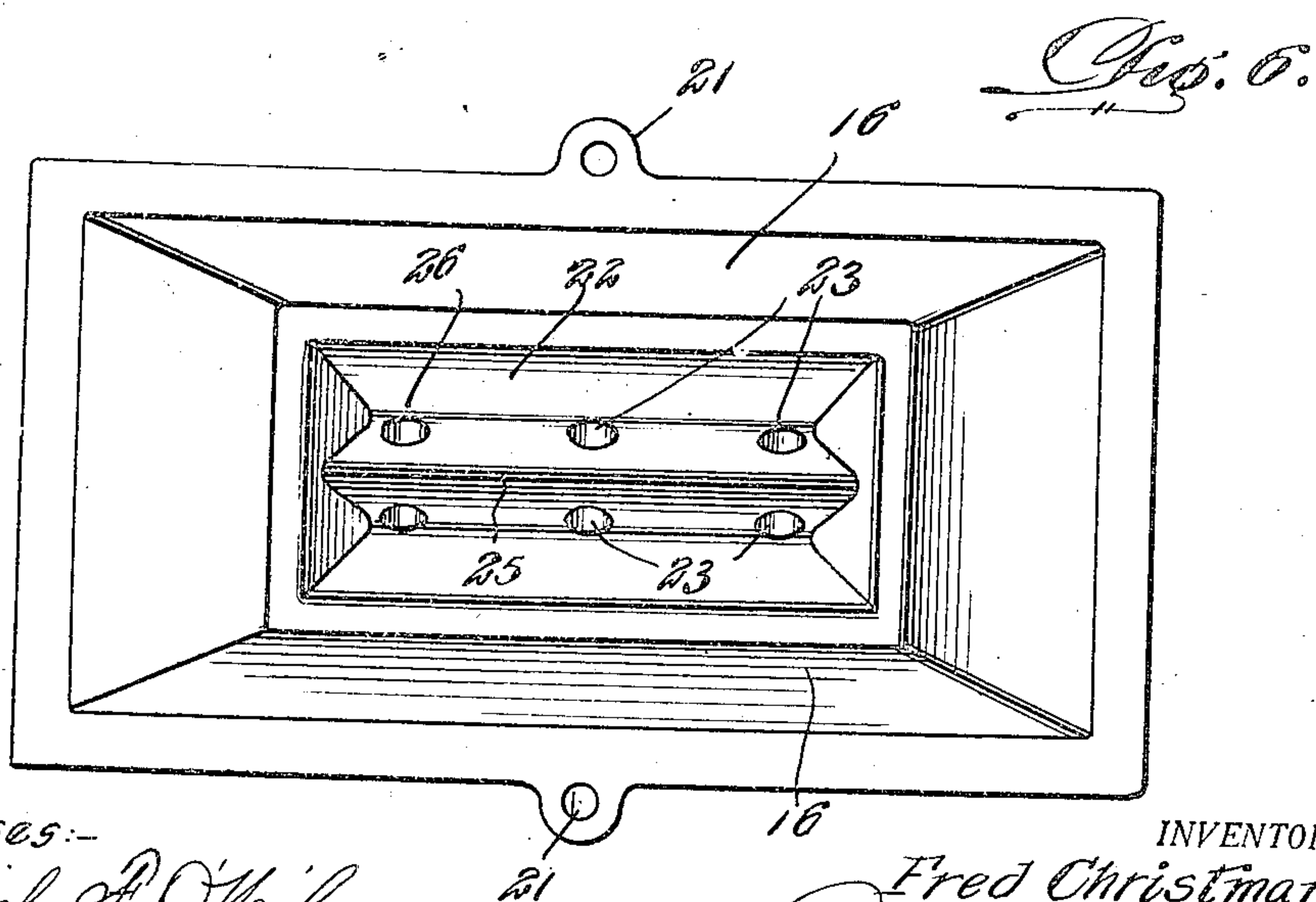
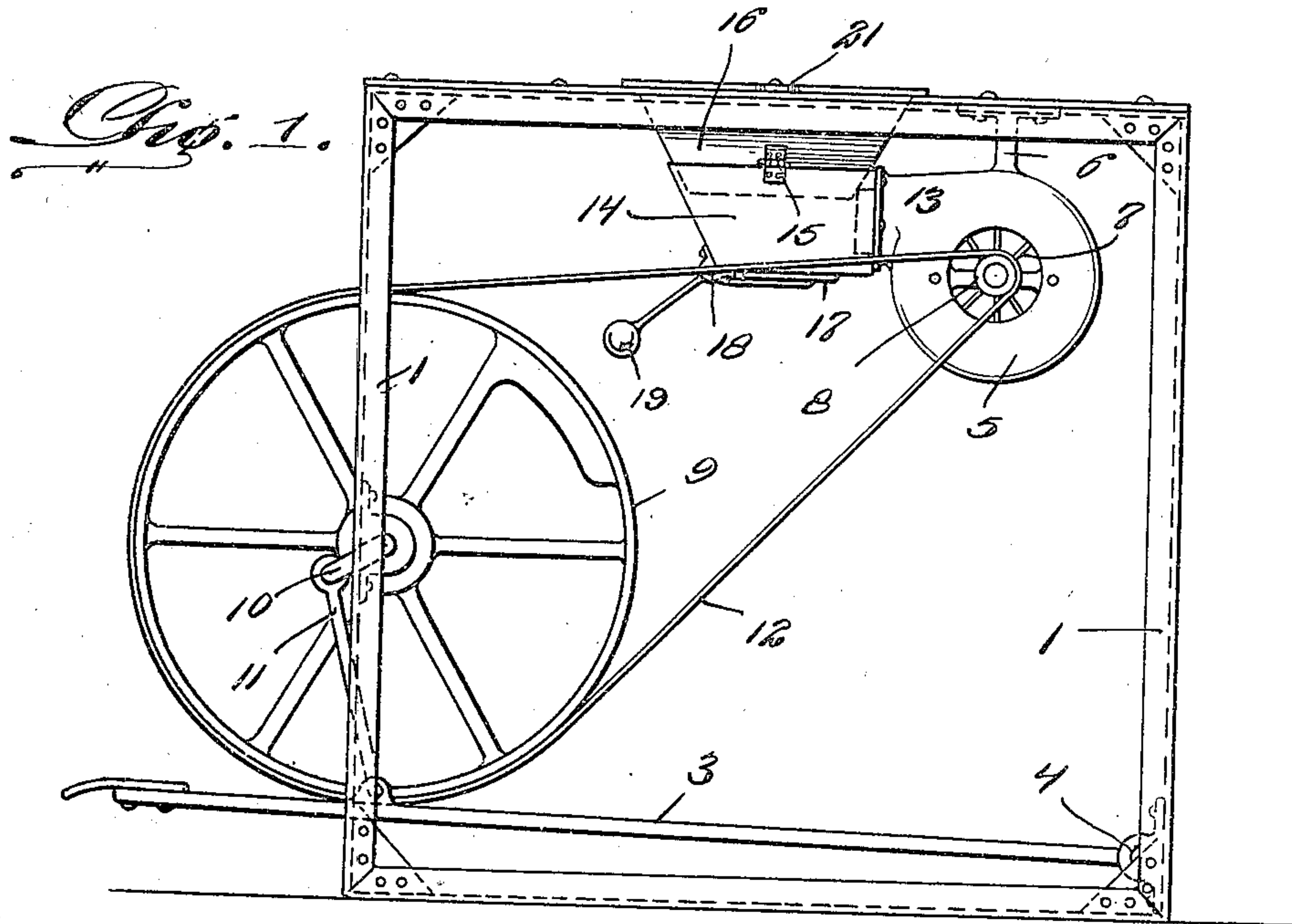


Jan. 2, 1923.

F. CHRISTMANN.  
FORGE.  
FILED MAY 31, 1921.

1,440,969

3 SHEETS-SHEET 1



Witnesses:-

*Daniel A. O'Neil*  
*William R. Thickett*

INVENTOR.

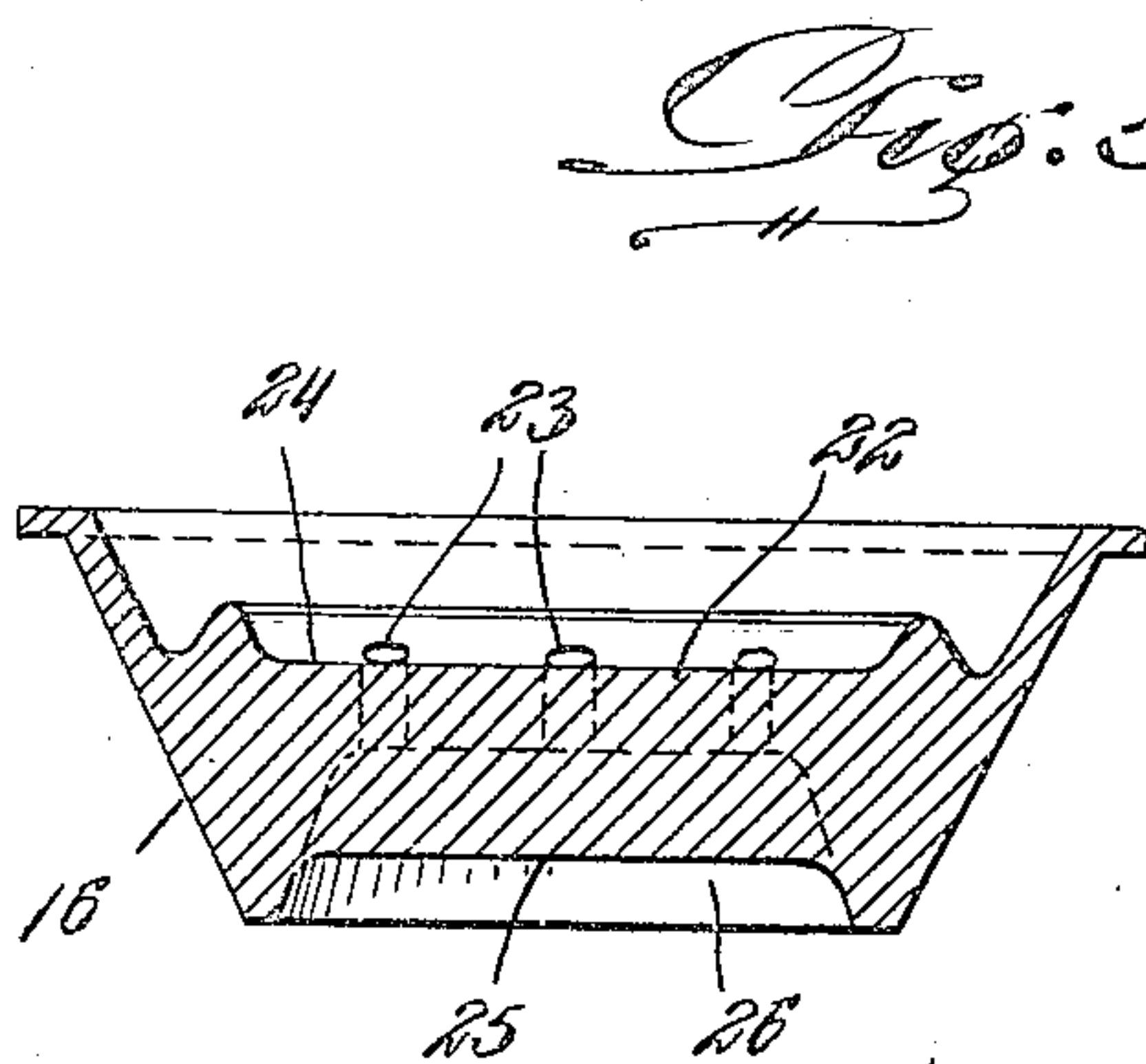
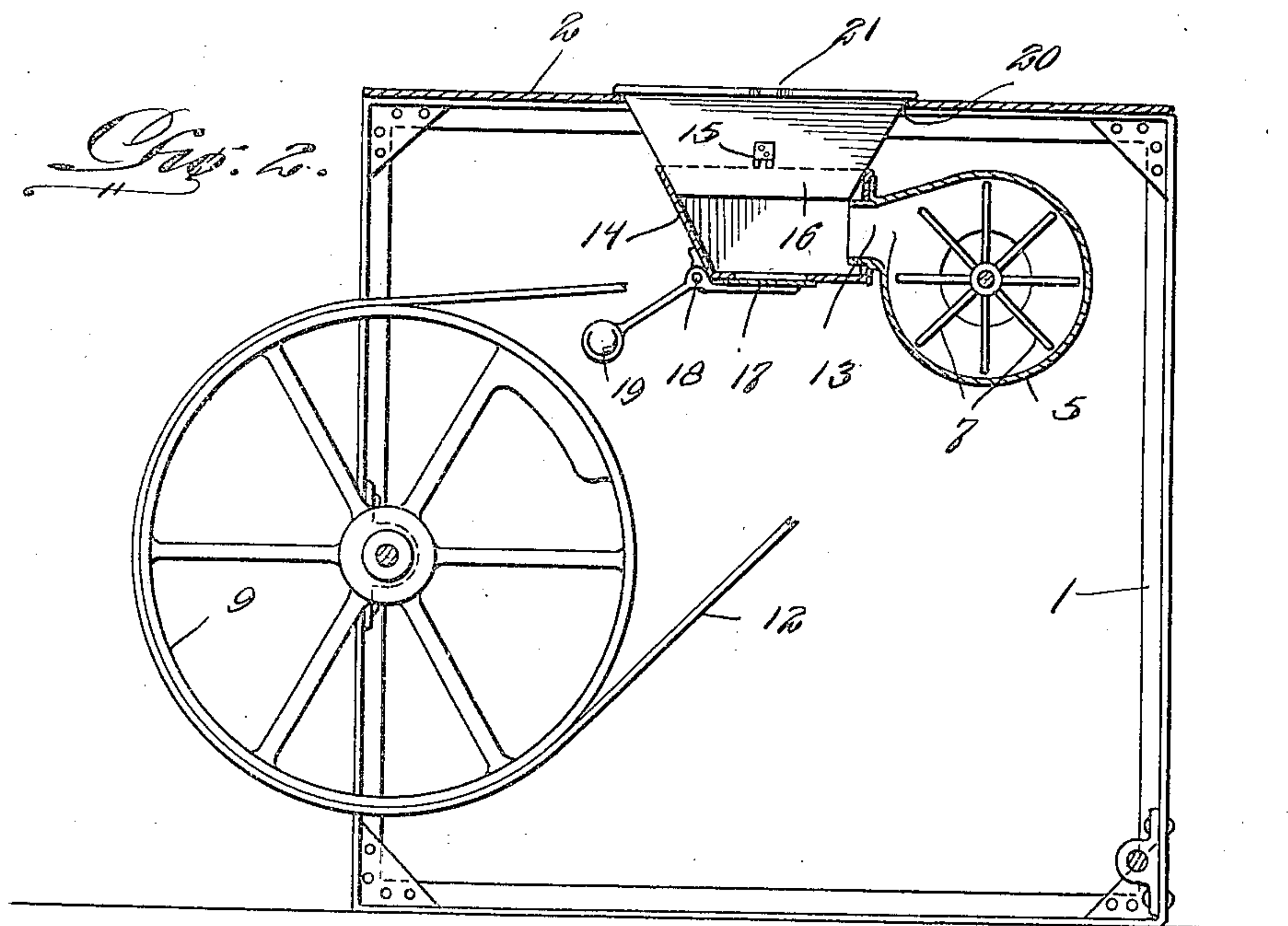
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Jan. 2, 1923.

F. CHRISTMANN.  
FORGE.  
FILED MAY 31, 1921.

1,440,969

3 SHEETS-SHEET 2



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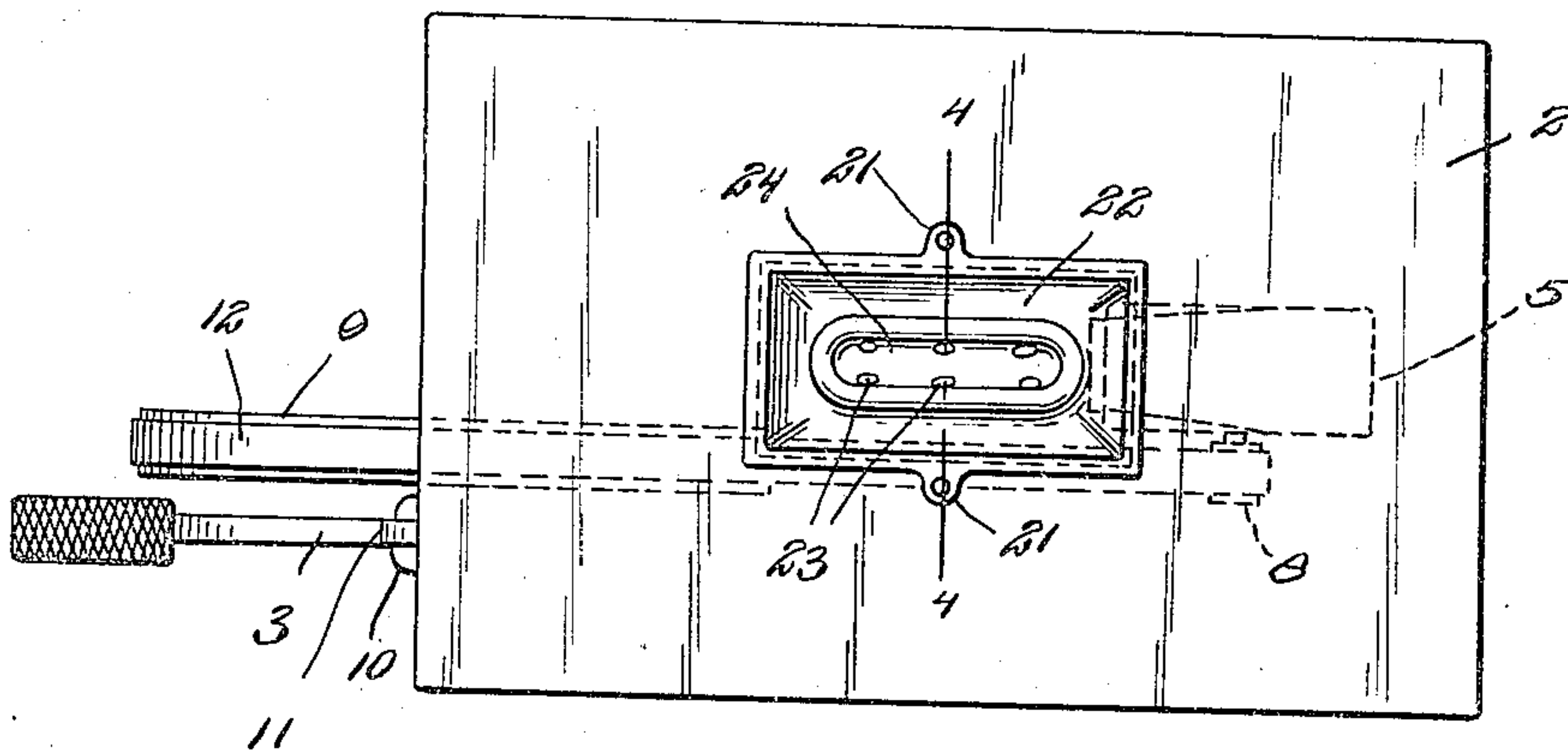
Jan. 2, 1923.

F. CHRISTMANN,  
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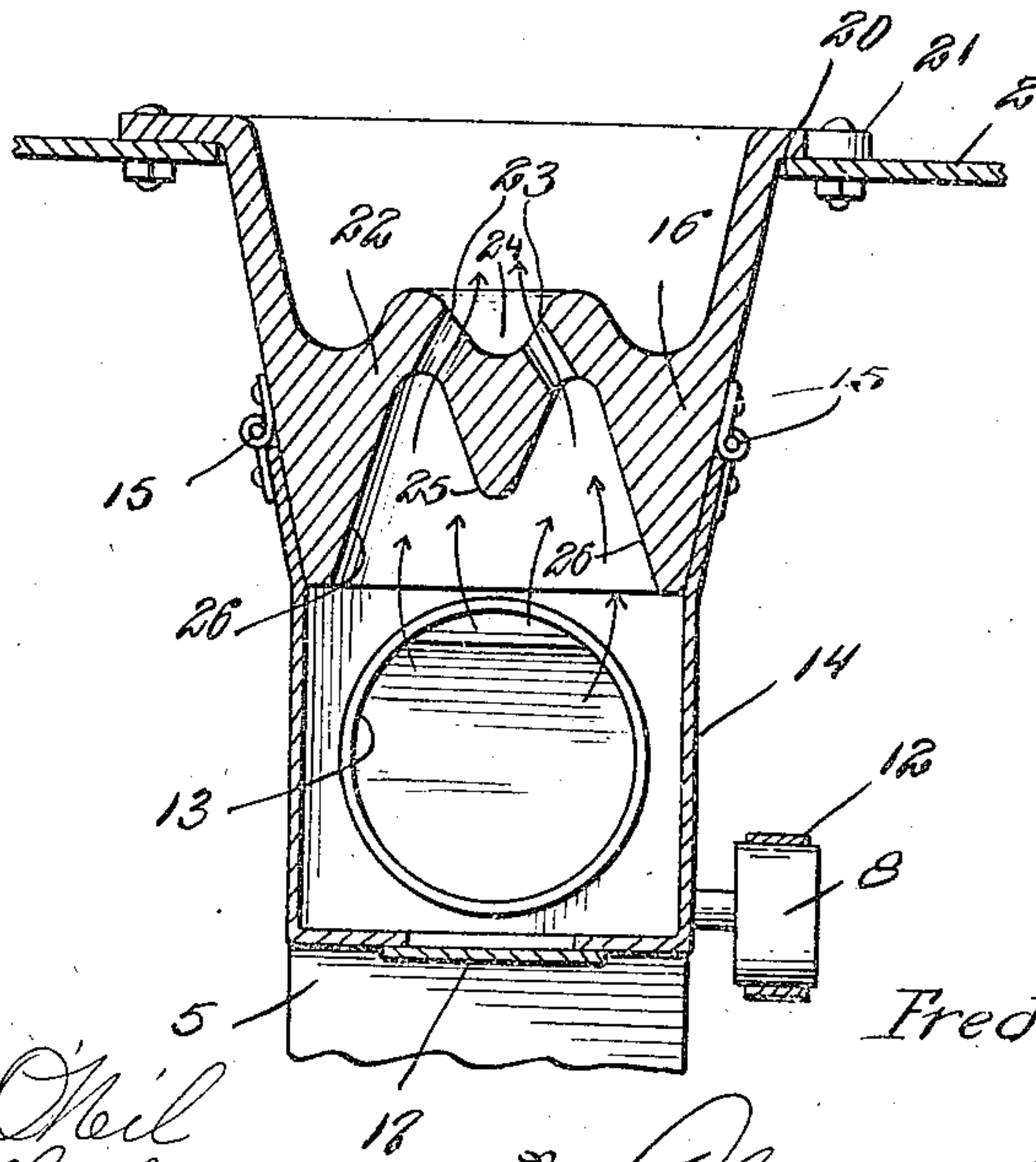
1,440,969

3 SHEETS-SHEET 3

*Fig. 3.*



*Fig. 4.*



Witnesses:-

*Daniel F. O'Neil*  
*William R. Thickstun*

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*Fred Christmann*

By *Clarence A. O'Brien*  
Attorney



## UNITED STATES PATENT OFFICE.

FRED CHRISTMANN, OF CHICAGO, ILLINOIS.

## FORGE.

Application filed May 31, 1921. Serial No. 473,964.

*To all whom it may concern:*

Be it known that I, FRED CHRISTMANN, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented new and useful Improvements in Forges, of which the following is a specification.

My present invention has for its object the provision of a forge which while adapted to be operated with but little coal is so constructed as to maintain a steady and clean fire capable of assisting in the performance of various kinds of work.

To the attainment of the foregoing, the invention consists in the improvement as hereinafter described and definitely claimed.

In the accompanying drawings, forming part of this specification:—

Figure 1 is a side elevation of my novel forge.

Figure 2 is a longitudinal vertical section of the same with some parts in side elevation.

Figure 3 is a top plan view of the forge.

Figure 4 is an enlarged detail transverse section taken in the plane indicated by the line 4—4 of Figure 3.

Figure 5 is a detail longitudinal vertical section through the fire casting.

Figure 6 is an enlarged detail inverted plan view of the fire casting.

Similar numerals designate corresponding parts in all of the views of the drawings.

In the present and preferred embodiment of my invention the forge comprises a frame 1, a top plate 2 fixed thereon, a pedal lever 3, pivoted at 4 to the frame, a blower casing 5 suspended at 6 from the top plate 2, a rotary blower 7 mounted in said casing and having a hand pulley 8, a band wheel 9 mounted in the frame and having a crank 10, a link 11 connecting the lever 3 and the crank 10, and a band 12 connecting the pulley 8 and the wheel 9. These elements are not, however, of the essence of my invention, and therefore the blower 7 may be rotated in any approved manner without affecting my invention as claimed.

In furtherance of my invention, the discharge trunk 13 of the blower casing 5 is arranged within one end of an ash receptacle 14, appropriately suspended at 15 from the pendent portion 16 of the fire casting, the said pendent portion 16 being telescoped in the receptacle 14 as illustrated. At 17 the receptacle 14 is provided with a dump

door, hinged at 18 and equipped with a weighted arm 19 through the medium of which it is normally maintained in closed position.

The pendent portion 16 of the fire casting rests in an opening 20 in the top plate 2, Figure 4, and in addition to the said pendent portion 16, the fire casting comprises outwardly reaching apertured lugs 21 which are superimposed upon and bolted to the top plate 2. Interiorly the pendent portion 16 of the fire casting is provided at an intermediate point in its height with a partition 22; the said partition being characterized by spaced longitudinal series of apertures 23, a channel 24 into which open the upper ends of the said apertures 23, and a pendent longitudinal central and downwardly-tapered rib 25 located between the lower ends of the apertures of the two sets. The hollow lower end of the casting portion 16 is tapered upwardly at its inner side as indicated by 26 in Figure 4 so as to assist in guiding the air blast to the lower ends of the apertures 23, and above the partition 22, the casting portion 16 is hollow and open as illustrated in Figures 3-5. In virtue of the two series of apertures 23 at opposite sides of the longitudinal center of the fire casting, it will be understood that the air blast supply will be evenly divided, and a steady and clean fire will be maintained, susceptible of use to advantage in the performance of various kinds of work.

I have entered into a detailed description of the construction and relative arrangement of parts embraced in the present and preferred embodiment of my invention in order to impart a full, clear and exact understanding of the said embodiment. I do not desire, however, to be understood as confining myself to the said specific construction and relative arrangement of parts inasmuch as in the future practice of the invention various changes and modifications may be made such as fall within the scope of my invention as defined in my appended claim.

Having described my invention, what I claim and desire to secure by Letters-Patent, is:—

The combination in a forge, of a top plate having an opening, means supporting said top plate, a blower casing suspended from the top plate and having a discharge trunk, a fire casting having lugs superimposed on and connected to the top plate and also hav-



ing a downwardly tapered pendent portion  
resting in the opening of the top plate; said  
pendent portion being hollow and containing  
at an intermediate point in its height a parti-  
5 tion characterized by a longitudinal central  
channel in its upper side, a longitudinal cen-  
tral and downwardly tapered rib at its un-  
derside and two longitudinal series of aper-  
tures at opposite sides of the channel and rib,

and a receptacle connected with the dis- 10  
charge trunk of the blower casing and tele-  
scopically receiving and connected to the  
pendent portion of the fire-casting and hav-  
ing a normally closed dump door on which is  
a weighted arm. 15

In testimony whereof, I affix my signa-  
ture.

FRED CHRISTMANN.