

No. 734,287.

PATENTED JULY 21, 1903.

F. X. VALLÉE.  
BRUSH CLEARING IMPLEMENT.

APPLICATION FILED MAR. 28, 1903.

NO MODEL.

Fig. 1

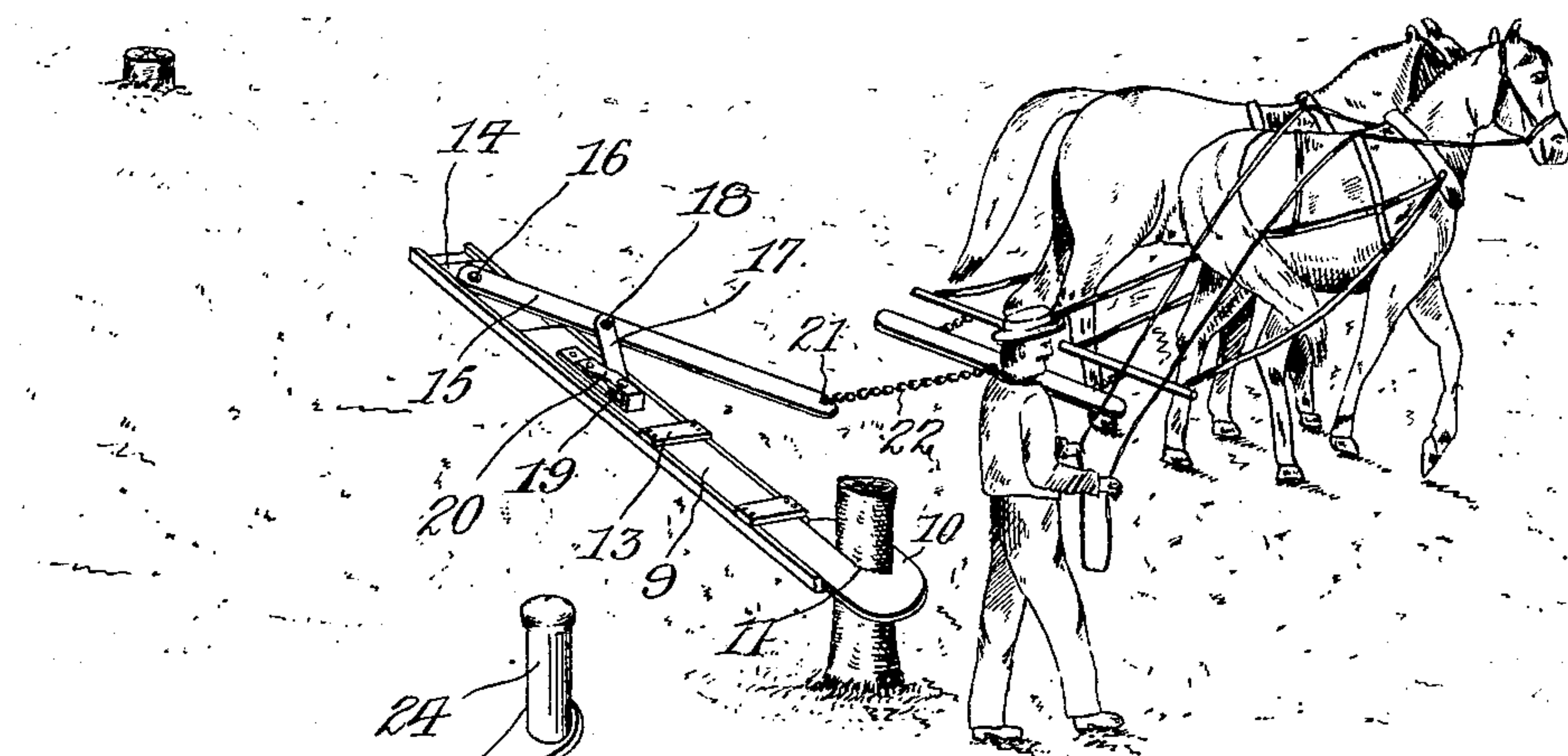
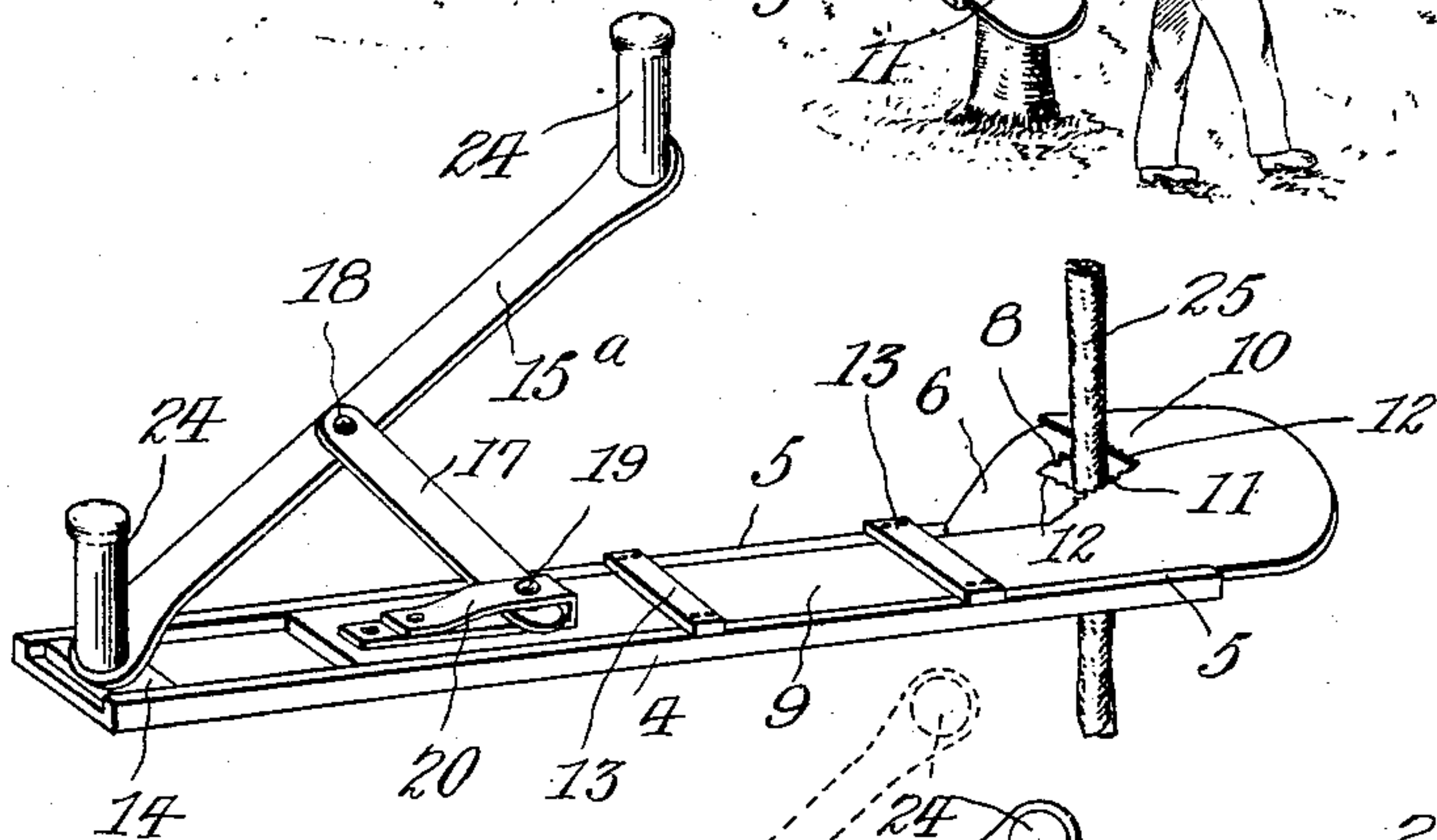
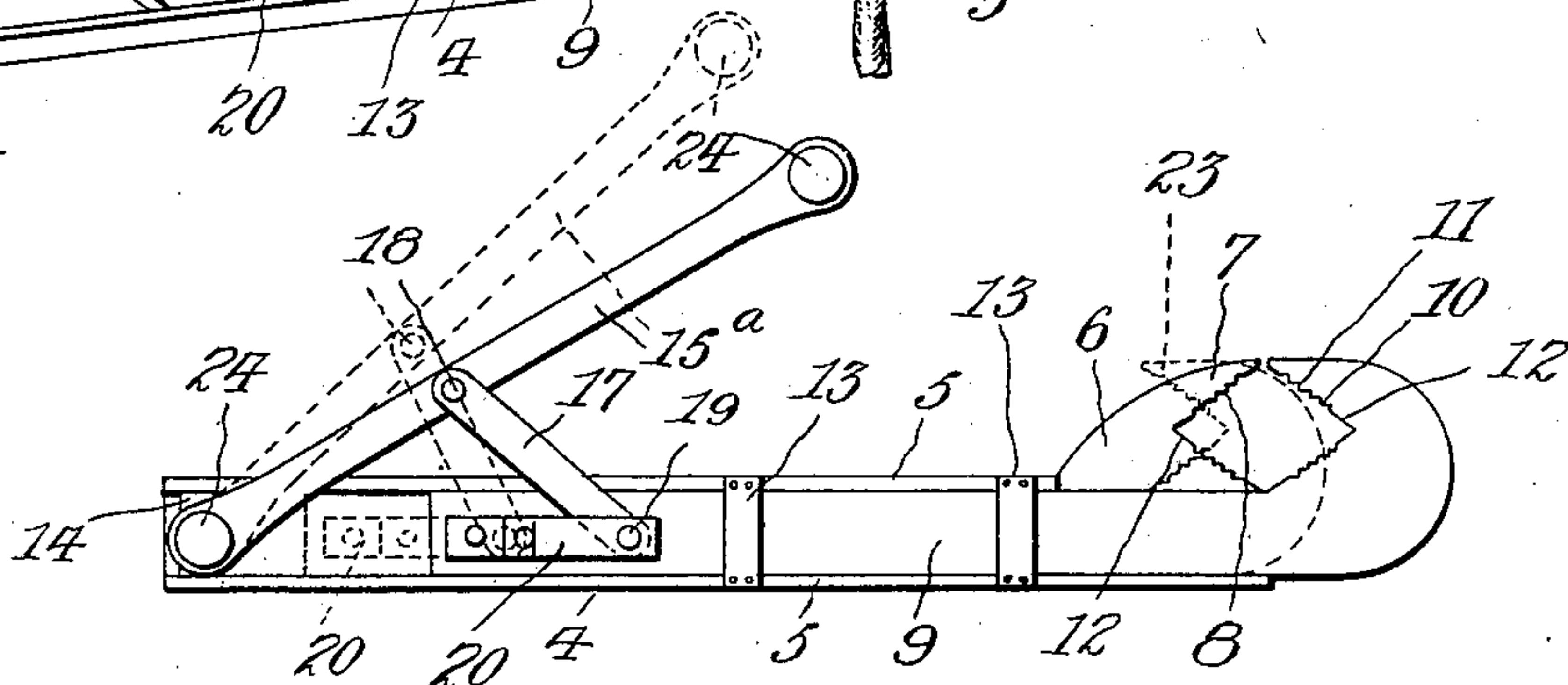


Fig. 2.



*Fig. 3.*



**Witnesses:**

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# UNITED STATES PATENT OFFICE.

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## BRUSH-CLEARING IMPLEMENT.

SPECIFICATION forming part of Letters Patent No. 734,287, dated July 21, 1903.

Application filed March 28, 1903. Serial No. 149,943. (No model.)

*To all whom it may concern:*

Be it known that I, FRANCOIS XAVIER VALLÉE, a subject of the King of Great Britain, residing at Woonsocket, county of Providence, State of Rhode Island, have invented certain new and useful Improvements in Brush-Clearing Implements; and I do hereby declare that the following is 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 relates to devices for cutting off stumps of trees and clearing away brush, &c. My object is to provide a device for this purpose which is very simple in construction and so adapted as to enable a rotary movement of the device to effect its purpose.

In its general construction the invention consists of a pair of knives or saws adapted to engage opposite sides of the tree-trunk and having means connected therewith for applying a suitable force, the device passing around and around the object to be cut in such a manner that the saws or knives are pressed toward each other and enter the body of the tree-trunk. They eventually penetrate the same to such an extent as to cut off the upper portion.

The invention consists in the construction and combination of parts to be more fully described hereinafter and definitely set forth in the claim.

In the drawings, which fully illustrate my invention, Figure 1 represents in perspective its practical application to a tree. Fig. 2 represents my invention also in perspective, the device represented in this view being of somewhat smaller proportions, as will appear hereinafter. Fig. 3 represents the structure shown in Fig. 2 in plan.

Throughout the drawings and specification the same numerals of reference indicate like parts.

Before proceeding to a detailed description of my invention I may say that I contemplate manufacturing the device in substantially two sizes, adapted, respectively, for use with a horse and with manual force, the construction in both instances being, however, substantially the same, as will appear.

Referring more particularly to the parts, 4 represents the body of the apparatus, which

consists substantially of an elongated plate, the opposite edges of which are formed into flanges 5, wherefore the member constitutes a shallow channel, as will be readily understood. At its inner extremity this member 4 is formed with a laterally-disposed fin or blade 6 of substantially the outline shown in Fig. 3. It will appear from an inspection of Fig. 3 that this fin or blade is formed into a V-shaped jaw 7, the edges of which are provided with saw-teeth 8, which may have a suitable set. In the channel formed between the aforesaid flanges 5 there is guided an elongated plate or blade 9, the inner extremity of which comprises a jaw 10, facing in the opposite direction to the aforesaid jaw 7, but having substantially the same form as indicated. It is also provided with saw-teeth 11, and it should appear that in both of these jaws the teeth do not extend to the vertex of the V, these untoothed portions having sharp edges and constituting knives or cutters 12.

The blade 9 is retained in place by transverse bars or keepers 13, which attach to the upper edges of the aforesaid flanges 5 in the manner shown, and it should be stated at this point that the thickness of the blade 9 is substantially the same as the height of these flanges, as will appear from the drawings. In this manner the two saw-blades are guided one upon the other.

Means are provided for effecting a rotation of this device about the axis of the tree-trunk after the device has been applied to the same in the manner indicated in Fig. 1. For this purpose the outer extremity of the member 4 is provided with a reinforcing-plate 14, to which is pivotally attached, at 16, a draft-lever 15. A link 17, which is attached to the pivot-pins 18 19, respectively, connects this lever 15 with a bracket 20, which bracket is rigidly attached to the aforesaid blade 9. The bracket 20 is preferably substantially of the form shown and the arrangement of the parts is such that an outward rotation of the lever 15 would operate to effect a movement of the jaws 7 and 10 toward each other, as will be readily understood. In the device shown in Fig. 1 the extremity of this lever is provided with an eye 21 for attaching the chain 22, leading from the horses, which are represented as actuating the device.



It should be understood that the horses are driven in a circle around and around the tree. It should now readily appear that the arrangement described operates to hold the jaws of the saw-blades firmly against the outside of the trunk, and as the operation progresses they of course make their way through the trunk, so that they eventually overlap each other and arrive in some such relative position as that indicated by the dotted outline 23. (Shown in Fig. 3.)

In Fig. 2 the device is shown with handles 24, applied respectively at each end of the lever 15<sup>a</sup>, which handles are expected to be grasped by a workman as he walks about the tree, as will be readily understood. In this figure the device is represented as operating upon the body of a small tree or sapling 25.

The knife-edges 12 at the bottoms of the V-shaped jaws are adapted to facilitate the cutting of small trees or saplings, trees of this kind being readily cut by means of these edges, and this is considered a good evasion of the difficulty arising in attempting to form and set saw-teeth practically at the bottom of a V-pointed jaw, such as that described.

While I have shown in the accompanying drawings the preferred form of my invention, it will be understood that I do not limit my-

self to the precise form shown, for many of the details may be changed in form or position without affecting the operativeness or utility of my invention, and I therefore reserve the right to make all such modifications as are included within the scope of the following claim or of mechanical equivalents to the structures set forth.

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

In a device of the class described, in combination, an elongated member having longitudinally-disposed flanges, a second member guided therebetween, transverse keepers connecting said flanges, said members comprising blades having substantially V-shaped jaws, said jaws comprising tooth portions and knife-edges at their vertices, a reinforcing-plate carried by said first member, a lever pivoted at said plate, and a link pivotally connecting said lever with said second member.

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

FRANCOIS XAVIER VALLÉE.

Witnesses:

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CLEMENT MENARD.