

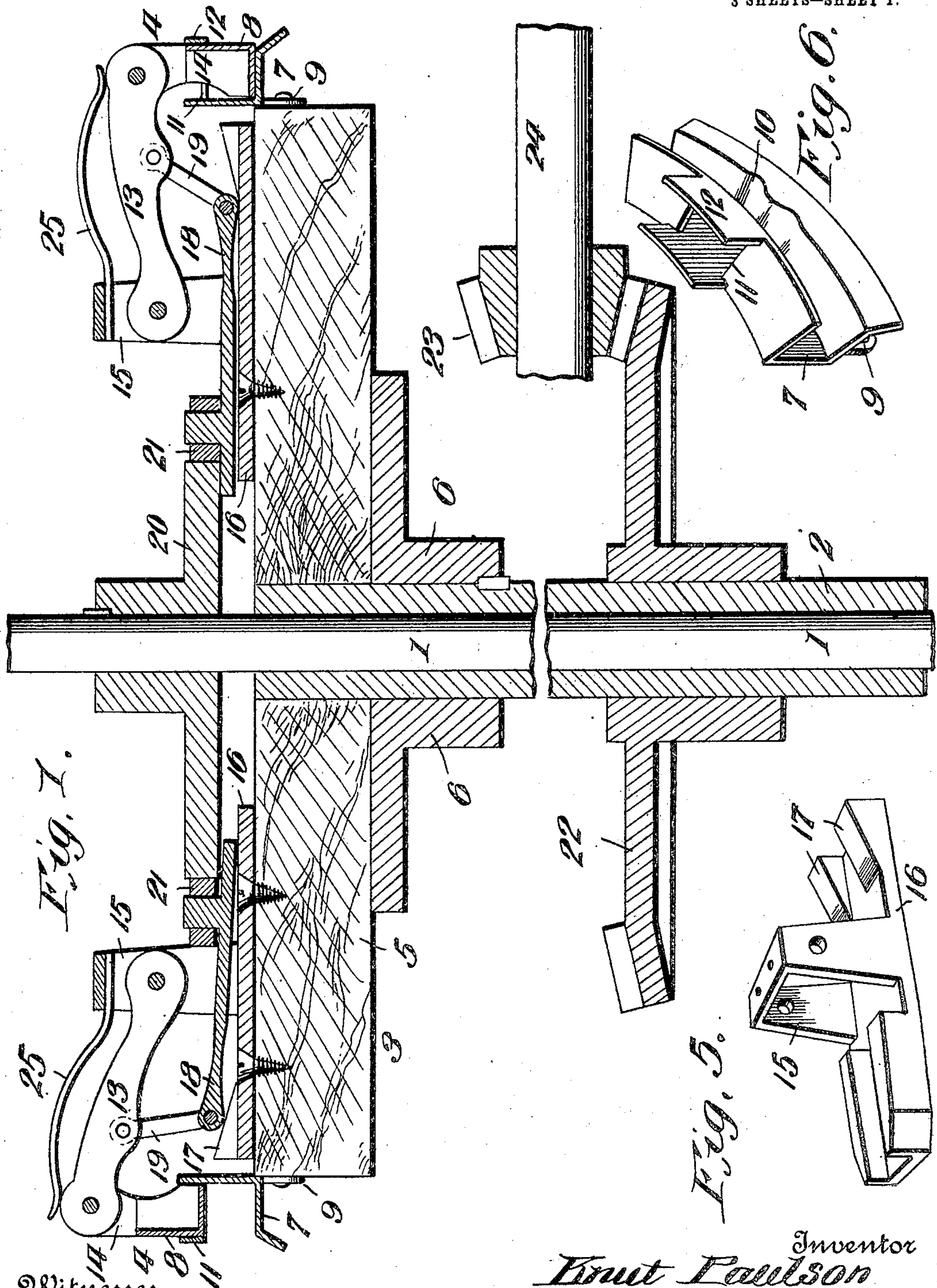
No. 812,677.

PATENTED FEB. 13, 1906.

K. PAULSON.
FISH NET LIFTING MACHINE.

APPLICATION FILED JULY 3, 1905.

3 SHEETS—SHEET 1.



Witnesses

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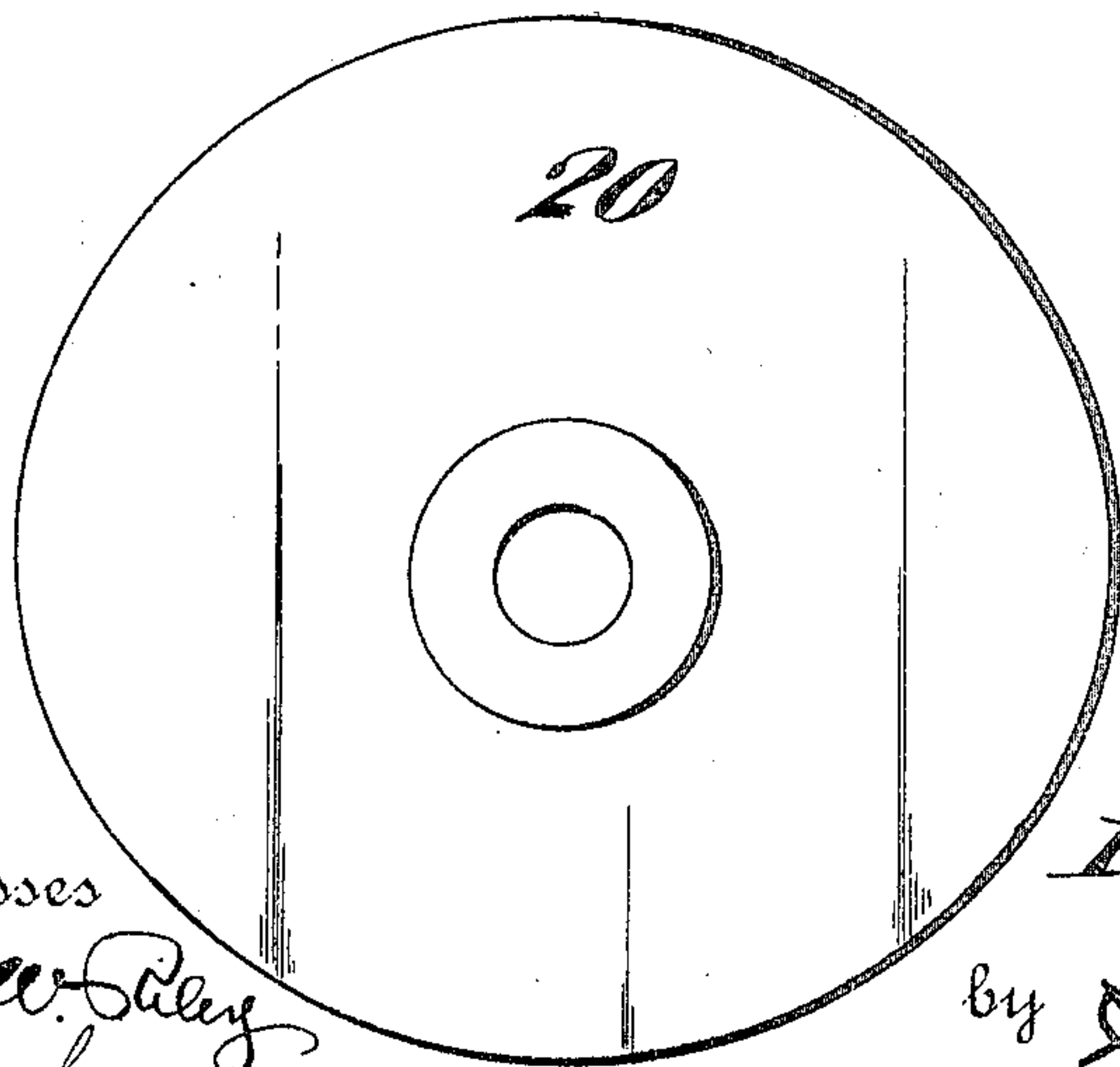
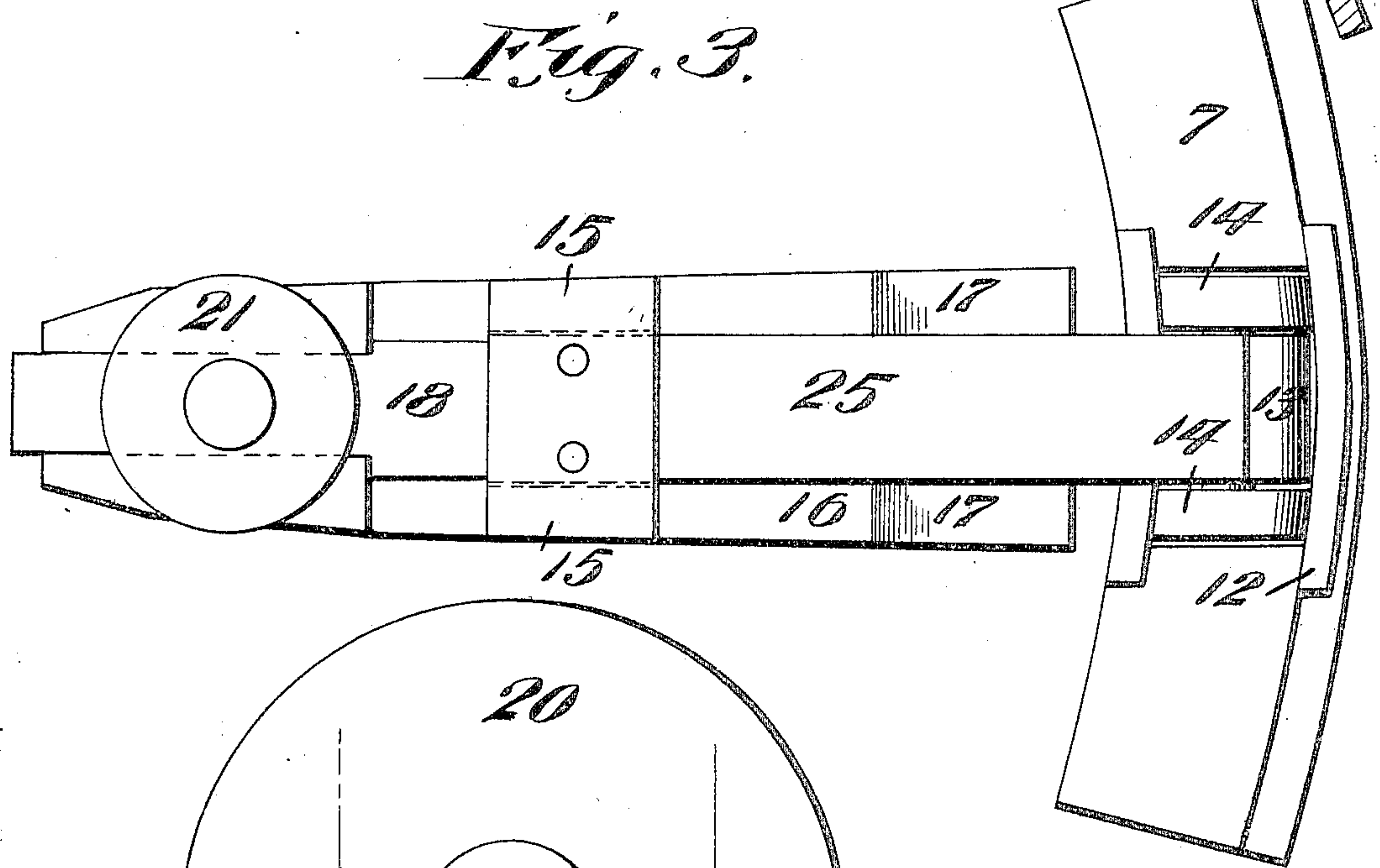
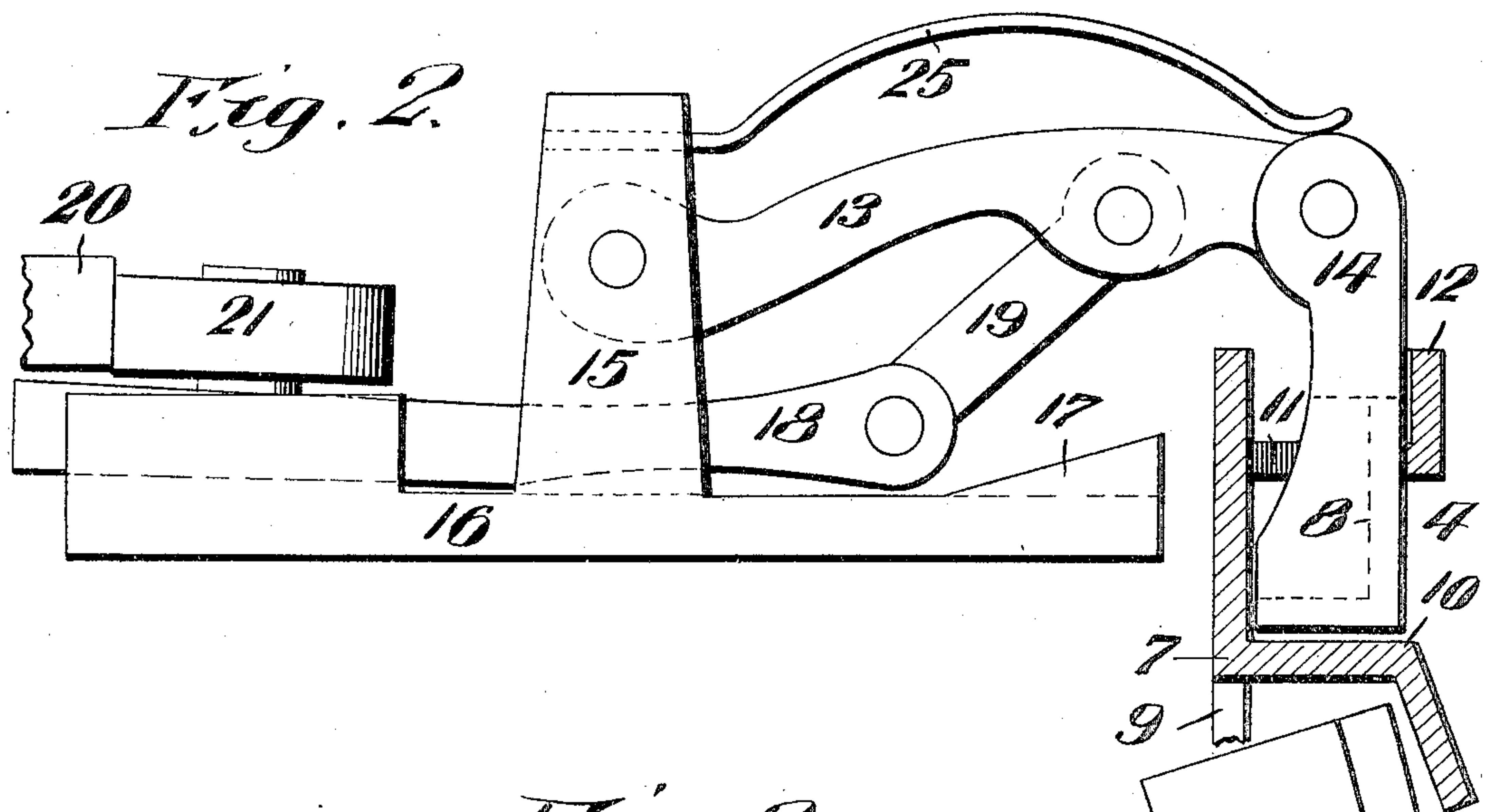
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3 SHEETS—SHEET 2.



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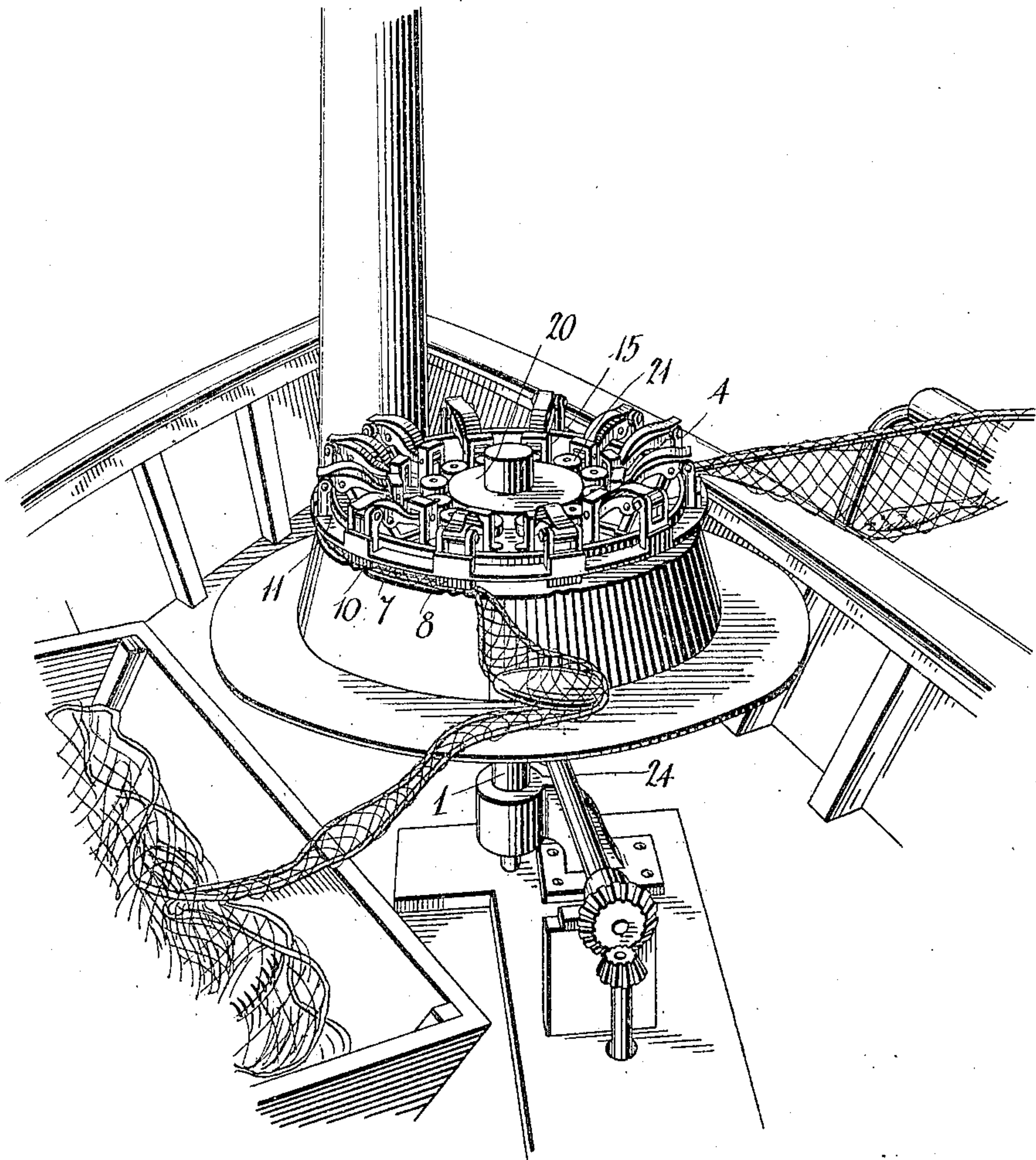
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3 SHEETS—SHEET 3.

FIG. 7



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UNITED STATES PATENT OFFICE.

KNUT PAULSON, OF MANISTIQUE, MICHIGAN.

FISH-NET-LIFTING MACHINE.

No. 812,677.

Specification of Letters Patent.

Patented Feb. 13, 1906.

Application filed July 3, 1905. Serial No. 268,096.

To all whom it may concern:

Be it known that I, KNUT PAULSON, a citizen of the United States, residing at Manistique, in the county of Schoolcraft and State of Michigan, have invented certain new and useful Improvements in Fish-Net-Lifting Machines; and I do 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.

My invention relates to improvements in fish-net-lifting machines; and it consists in the novel construction, combination, and arrangement of devices hereinafter described and claimed.

The object of the invention is to improve and simplify the construction and operation of machines of this character, and thereby render the same more efficient and durable in use and less expensive to manufacture.

The above and other objects, which will appear as the nature of my invention is better understood, are accomplished by means of the construction illustrated in the accompanying drawings, in which—

Figure 1 is a sectional view through a portion of a fish-net-lifting machine constructed in accordance with my invention. Fig. 2 is a detail view, on an enlarged scale, of one of the clamping devices. Fig. 3 is a top plan view of the parts shown in Fig. 2. Fig. 4 is a detail view of the cam for actuating the clamping devices. Fig. 5 is a perspective view of one of the guide-brackets. Fig. 6 is a similar view of the stationary jaw member of one of the clamping devices, showing the guides for the corks of the fish-net and the movable jaw of the clamping device. Fig. 7 is a perspective view showing the machine in operative position in a boat and engaged in drawing in a net.

Referring to the drawings by numeral, 1 denotes a shaft which is fixedly mounted in a suitable support and which has rotatably mounted thereon a tube or sleeve 2. Fixed upon one end of the sleeve 2 is a rotary head or table 3, which carries a series of radially-disposed clamping devices 4, adapted to engage the corks of the fish-net to be lifted. The head 3, as shown, consists of a disk 5 of wood secured to a flanged collar 6, which may be keyed or otherwise secured to the sleeve 2.

Clamping devices 4 are arranged radially around one face of the head 3 and are spaced

apart at intervals corresponding to the distance between the corks upon the fish-net. Each of said devices comprises a stationary jaw member 7 and a movable jaw member 8. The member 7 is preferably in the form of a longitudinally-curved three-sided casting, which is secured to the periphery of the disk 5 by screws or the like, which pass through apertured lugs 9. One wall of the member or casting 7 is corrugated, as shown at 10, to form the stationary jaw of the clamp, and the adjacent portions of said member are recessed, as shown at 11, to form a guide for the movable jaw 8. The latter is further guided and prevented from swinging outwardly by a projection 12, formed adjacent to the opening 11, as clearly shown in Fig. 6 of the drawings. The movable jaw member 8 is adapted to slide through the opening 11 beneath the projection 12 and is pivotally mounted upon the outer end of a lever 13. As shown, the clamping-jaw 8 is cast hollow with two projecting lugs 14, between which the outer end of the lever 13 is pivoted. The latter has its opposite end pivoted between projecting lugs 15, formed adjacent to the center of a guide-bracket 16, which may be screwed or otherwise secured upon one face of the disk 5, as shown. Said bracket 16 has at its ends projecting flanges 17, which form guides for an operating-slide 18, which has its outer end pivotally connected to the lever 13 by a link 19.

In order to automatically operate the sliding jaws 8 of the clamp during a portion of the revolution of the head 3, I provide a cam 20. The latter is keyed upon the stationary shaft 1, as shown, and has its periphery co-acting with the inner ends of the operating-slides 18. As shown, I preferably provide friction-rollers 21 to engage the periphery of the cam, said rollers being journaled upon studs formed or provided upon the slides 18, as clearly shown in Fig. 1. In order to hold the sliding jaws 8 normally in their closed position and at the same time move the slides 18 inwardly to cause the rollers 21 to engage the cam 20, I provide the lugs 15 with springs 25, which have their free ends bearing upon the outer ends of the levers 13, as shown.

The sleeve 2, and hence the head 3, may be rotated in any desired manner. As shown, it is rotated by keying or otherwise securing to it a beveled wheel 22, which meshes with a beveled pinion 23 upon a suitably-driven power-shaft 24.

The construction, use, and advantages of the invention will be readily understood from the foregoing description, taken in connection with the accompanying drawings. It will be seen that when the head 3 is rotated the slides 18 will be moved outwardly as the rollers pass over the large portion of the cam 20, and the jaws 8 will be thereby swung to their open position to receive the corks upon the fish-net between them and the stationary jaws 10, and that as said head continues to rotate the springs 25 will force the jaws 8 into engagement with the said corks as soon as the rollers 21 engage the smaller portion of the cam.

While I have shown and described the preferred embodiment of my invention, it will be understood that I do not wish to be limited to the precise construction herein set forth, since various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

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

1. A fish-net-lifting machine comprising a rotary head, guide-brackets thereon, levers, movable jaws carried by said levers, stationary jaws upon said head, slides mounted in said guide-brackets and adapted to actuate said levers, and a cam for operating said slides.

2. A fish-net-lifting machine comprising a rotary head, guide-brackets thereon, levers mounted in said brackets, movable clamping-jaws upon said levers, stationary clamping-

jaws upon said head, slides mounted in said guide-brackets, links connecting said slides and said levers, springs for actuating said movable jaws in one direction, and a cam co-acting with said slides to move said movable jaws in the opposite direction.

3. A fish-net-lifting machine, comprising a stationary shaft, a head rotatably mounted upon said shaft, radially-disposed guide-brackets upon said head, levers pivotally mounted in said guide-brackets, movable jaws upon said levers, stationary jaws upon said head, operating-slides in said guide-brackets, connections between said slides and said levers, and a cam upon said shaft to actuate said slides, substantially as described.

4. A fish-net-lifting machine comprising a stationary shaft, a sleeve mounted to rotate thereon, means for rotating said sleeve, a circular head secured upon said sleeve, radially-disposed guide-brackets upon said head, levers pivotally mounted in said guide-brackets, stationary clamping-jaws upon said head and formed with guide-openings, movable clamping-jaws pivotally mounted upon said levers and adapted to slide in the guide-openings in said stationary jaws, slides mounted in said guide-brackets, links connecting said slides and said levers, friction-rollers upon said slides, and a cam fixed upon said shaft and adapted to engage said friction-rollers.

In testimony whereof I have hereunto set my hand, in presence of two subscribing witnesses.

KNUT PAULSON.

Witnesses:

C. B. MERSEREAU,

E. H. JEWELL.