No. 885,929.

PATENTED APR. 28, 1908.

J. G. KEITH.
SIEVE ADJUSTER.
APPLICATION FILED JULY 16, 1907.

2 SHEETS-SHEET 1.

Fig.1.

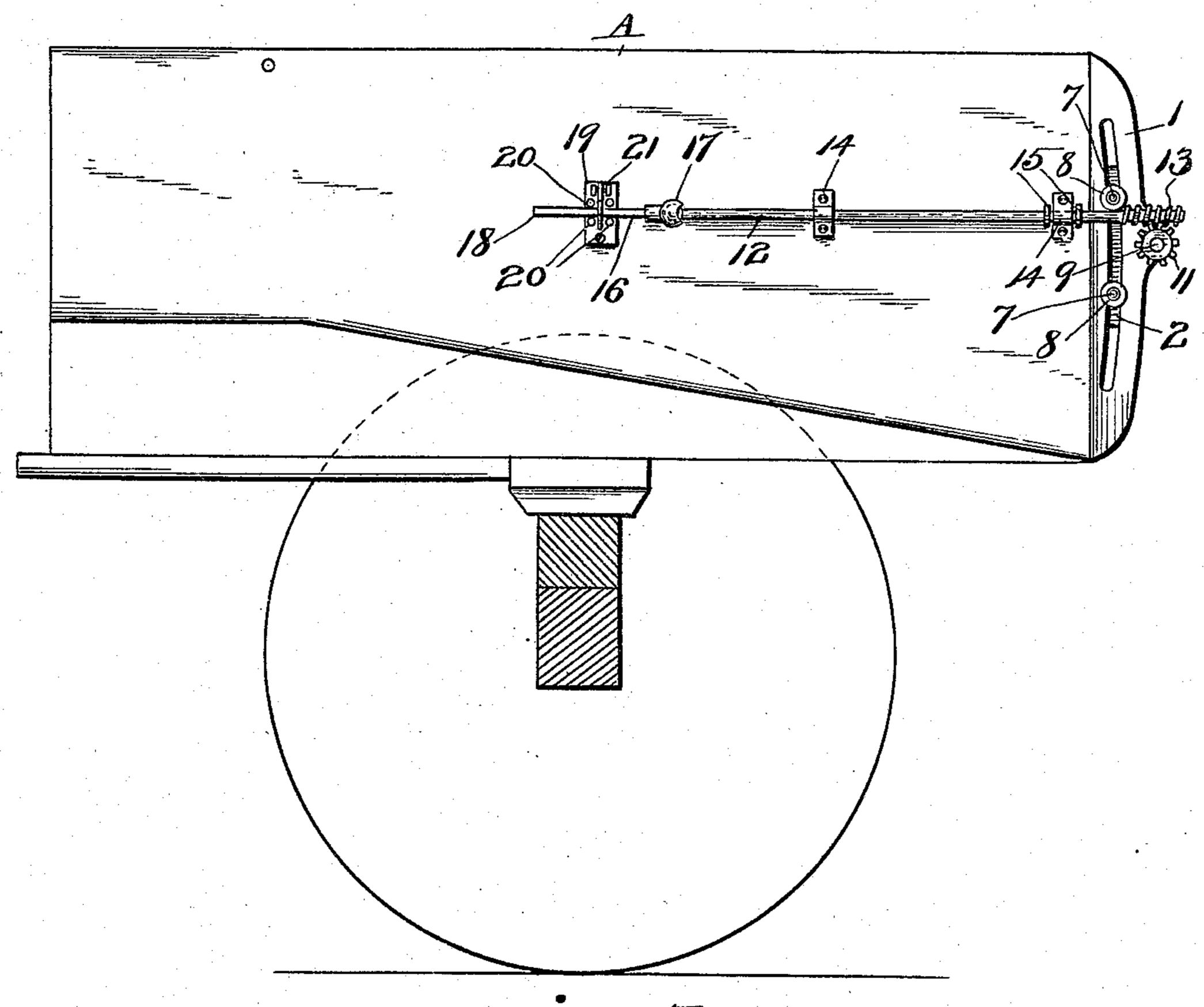
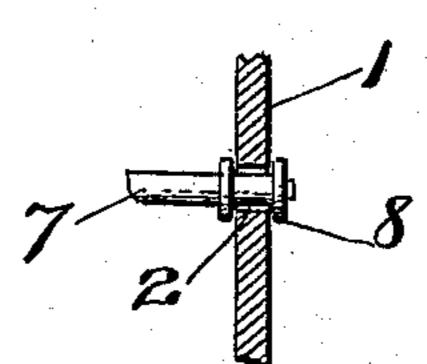


Fig. 5.



WITNESSES:

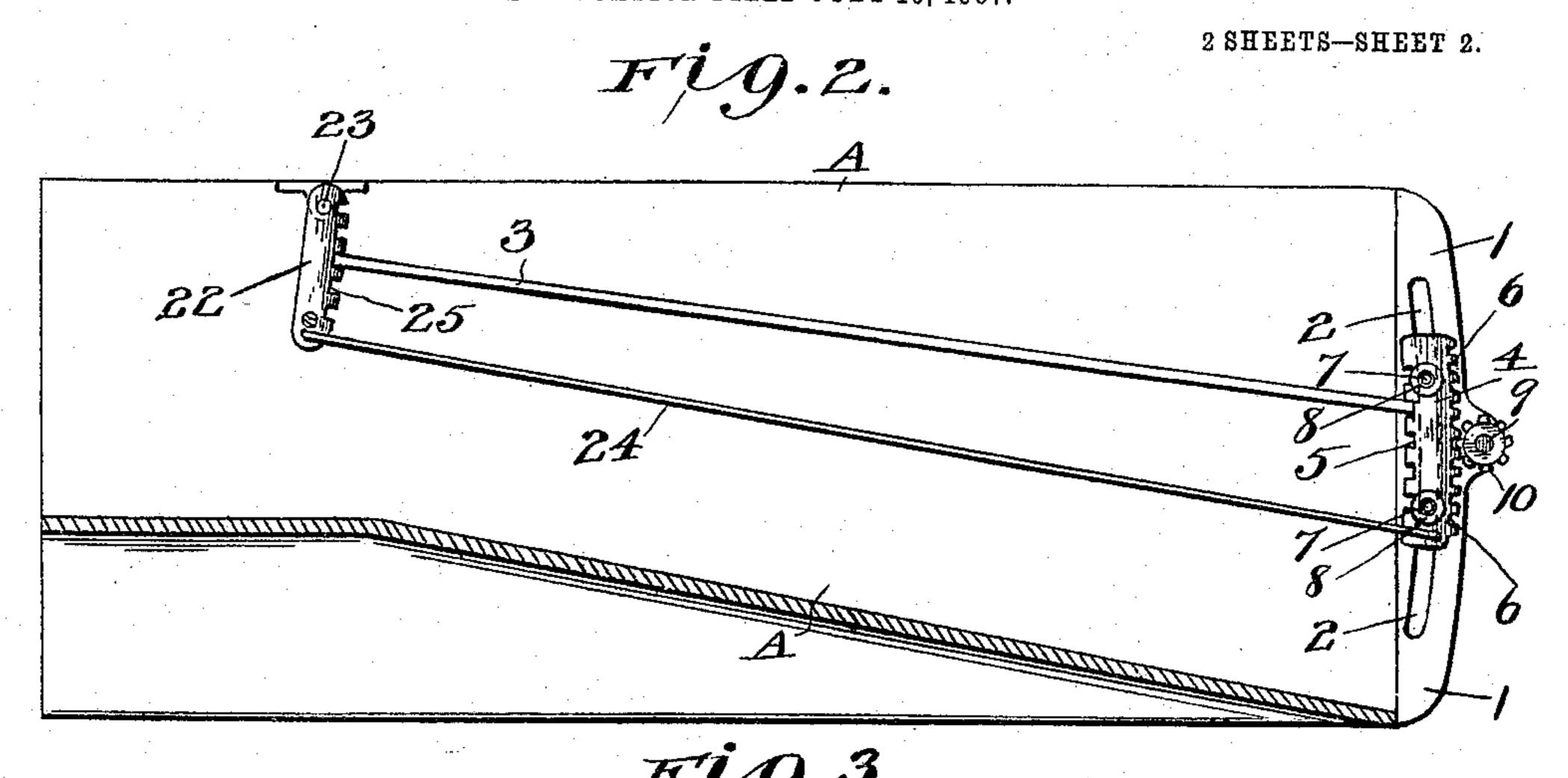
Jas H. Blackwood Maus offly, THE NORRIS PETERS CO., WASHINGTON, D. C.

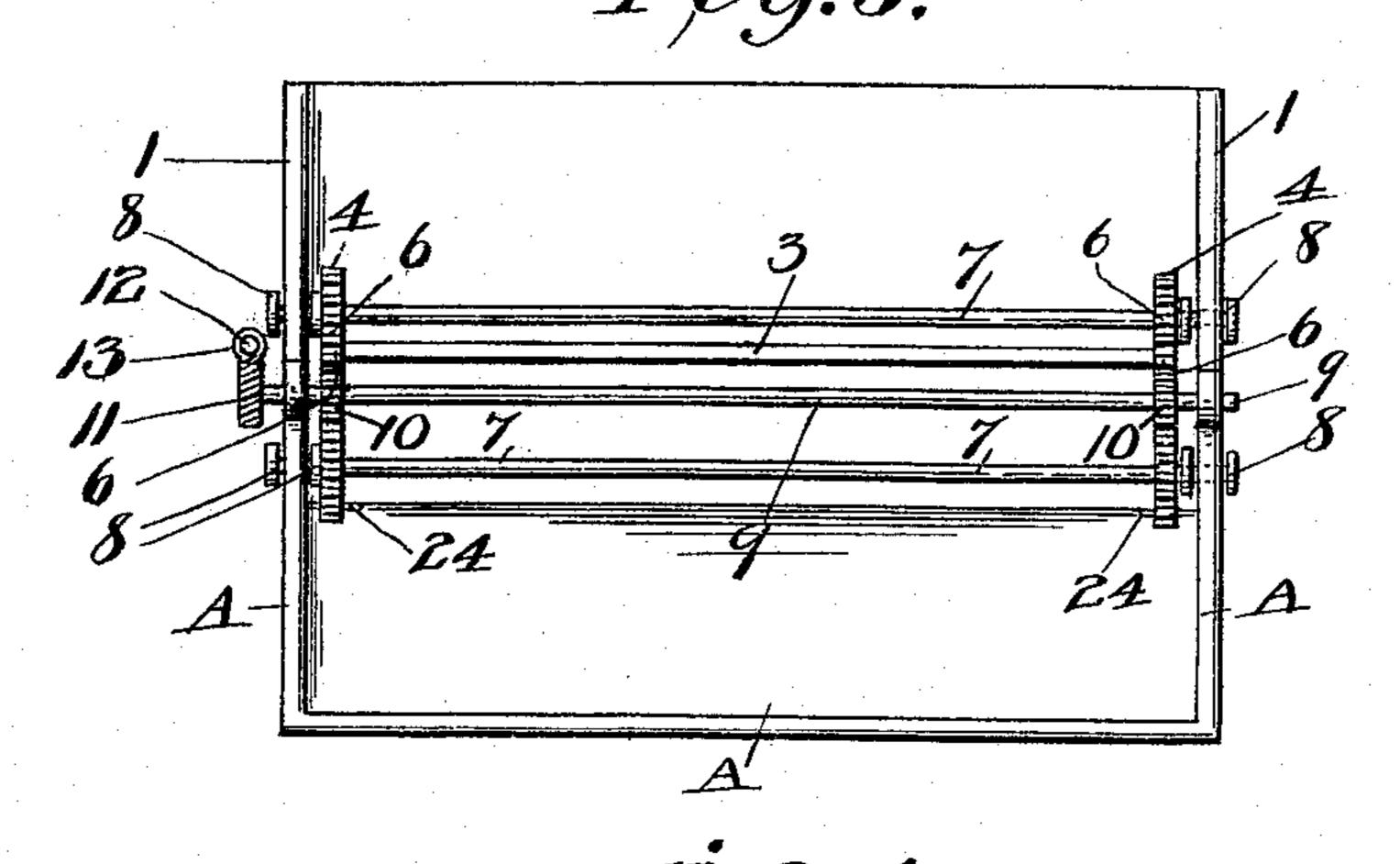


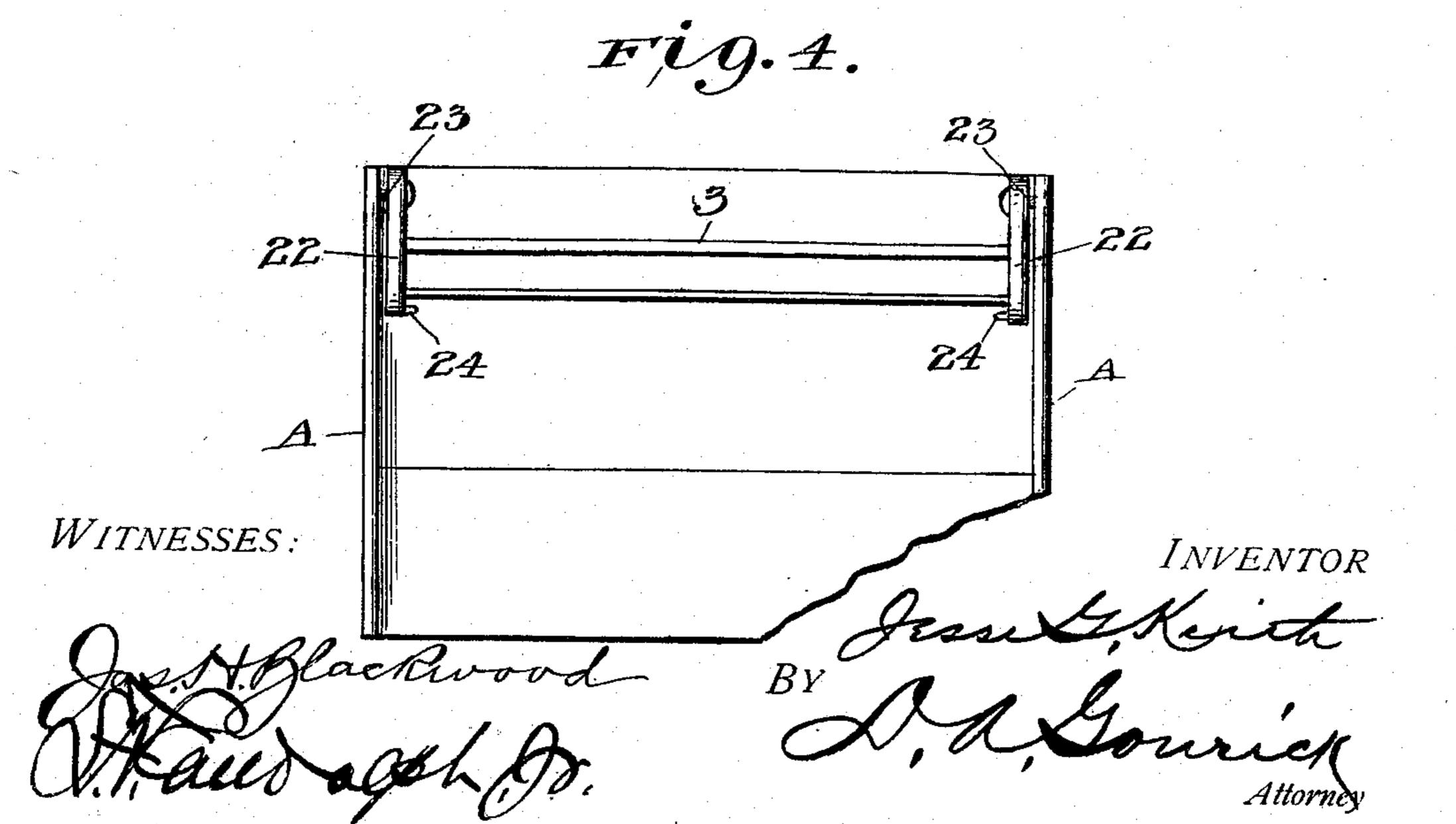
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LIVO OF THE RESIDENCE OF MARKETS AND ASSUMING SULLOS.

UNITED STATES PATENT OFFICE.

JESSE G. KEITH, OF SPOKANE, WASHINGTON.

SIEVE-ADJUSTER.

No. 885,929.

Specification of Letters Patent.

Patented April 28, 1908.

Application filed July 16, 1907. Serial No. 384,056.

To all whom it may concern:

Be it known that I, Jesse G. Keith, a citizen of the United States, residing at Spokane, in the county of Spokane and State of 5 Washington, have invented certain new and useful Improvements in Sieve-Adjusters, of which the following is a specification.

My invention relates to devices for regulating the angles of the sieves in a threshing 10 or kindred machine and has for its object the provision of a device for adjusting the sieves while the machine is in operation, if desired, the adjusting means being exterior of the casing of the machine.

The construction and operation of my improved sieve adjuster will be described in detail hereinafter and illustrated in the accompanying drawings in which—

Figure 1 is a side view of a sieve shoe show-20 ing my improvements installed thereon, Fig. 2, a longitudinal sectional view, Fig. 3, a front end view, and Fig. 4, a rear end view.

In the drawings similar reference characters indicate corresponding parts throughout 25 the several views.

The sieve shoes of a threshing machine are represented at A and have secured at their front ends plates 1 with curved slots 2 therein. The sieves 3 are supported at one 30 end by means of racks consisting of plates 4 having combs 5 on one side to receive the sieves 3 and segmental racks 6 on the other side. Plates 4 are slidably secured in slots 2 by means of rods 7 connecting them and 35 having rollers 8 on their ends that ride in said slots.

9 indicates a shaft journaled in plates 1 having pinions 10 keyed thereto that engage racks 6. Keyed to one end of shaft 9 is a 40 worm wheel 11 and geared thereto is a shaft 12 having a worm 13 engaging said worm wheel 11. Shaft 12 is journaled in clips 14 secured to shoe A, 15 indicating beads on the shaft on each side of one of the clips 14 to pre-45 vent longitudinal movement of the shaft 12.

16 indicates a short shaft connected with shaft 12 by means of universal joint 17 the end of shaft 16 being rectangular in cross section as shown at 18 to receive a wrench or 50 key for rotating shafts 16 and 12.

19 indicates a plate secured to shoe A having pins 20 projecting therefrom to engage the rectangular portion 18 to hold shafts 12

on plate 19 to engage shaft 16 and hold rec- 55 tangular end 18 in engagement with pins 20.

22 indicates racks to hold the rear ends of the sieves 3, said racks being pivotally secured at their upper ends to shoes A as shown at 23, and connected at their lower 60 ends with plates 4 by means of rods 24, so that as the plates 4 move up and down the racks 22 are swung so that the combs 25 thereon are in line with the combs 5 on the

plates.

From the above description and an inspection of the drawings it will be apparent that the sieve racks may be adjusted as often as desired without stopping the operation of the machine to which attached and that the em- 70 ployment of the worm gear admits of a very accurate adjustment so that the sieves may be set at the angle necessary to most successfully perform their work, no time being lost in stopping and starting the machine to set 75 the sieves. It will be also apparent that, if desired, a battery of sieves may be used, the number of individual sieves being limited only to the number of teeth in combs 5 and 25.

Having thus described my invention what 80

I claim is—

1. In combination with sieve shoes, slotted plates secured thereto, sieve racks slidably mounted on said slotted plates having gear teeth on one edge thereof, a shaft journaled 85 in said plates having pinions keyed thereto meshing with said gear teeth, a worm wheel keyed to one end of said shaft, a worm shaft journaled on one of said shoes and meshing with the worm wheel aforesaid, and a short 90 shaft connected by means of a universal joint with said worm shaft, said short shaft having a rectangular end to receive a tool for rotating it, and a clamp to engage said short shaft to hold it from rotation, substantially as 95 shown and described.

2. In combination with sieve shoes, slotted plates secured thereto, sieve racks pivotally secured to said shoes, other sieve racks, cross rods connecting said racks, rollers on the ends 100 of said rods and mounted in the slots in the plates, rods connecting each of the slidable racks, gear teeth on said slidable racks, a shaft journaled on said slotted plates, pinions keyed to said shaft and meshing with the gear 105 teeth on the slidable plates, a worm wheel keyed to one end of said shaft, a worm shaft and 16 from rotation, and 21 a hook pivoted | journaled on one of the sieve shoes and

geared with said worm wheel, a short shaft connected with the worm shaft by means of a universal joint, said short shaft having a rectangular end to receive a tool for rotating it, and a clamp to engage said rectangular end of the short shaft to hold it from rotation, substantially as shown and described.

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In testimony whereof I hereto affix my signature in the presence of two witnesses.

JESSE G. KEITH.

Witnesses:

G. R. LOVEJOY, H. T. W. BENTELSPACHER.