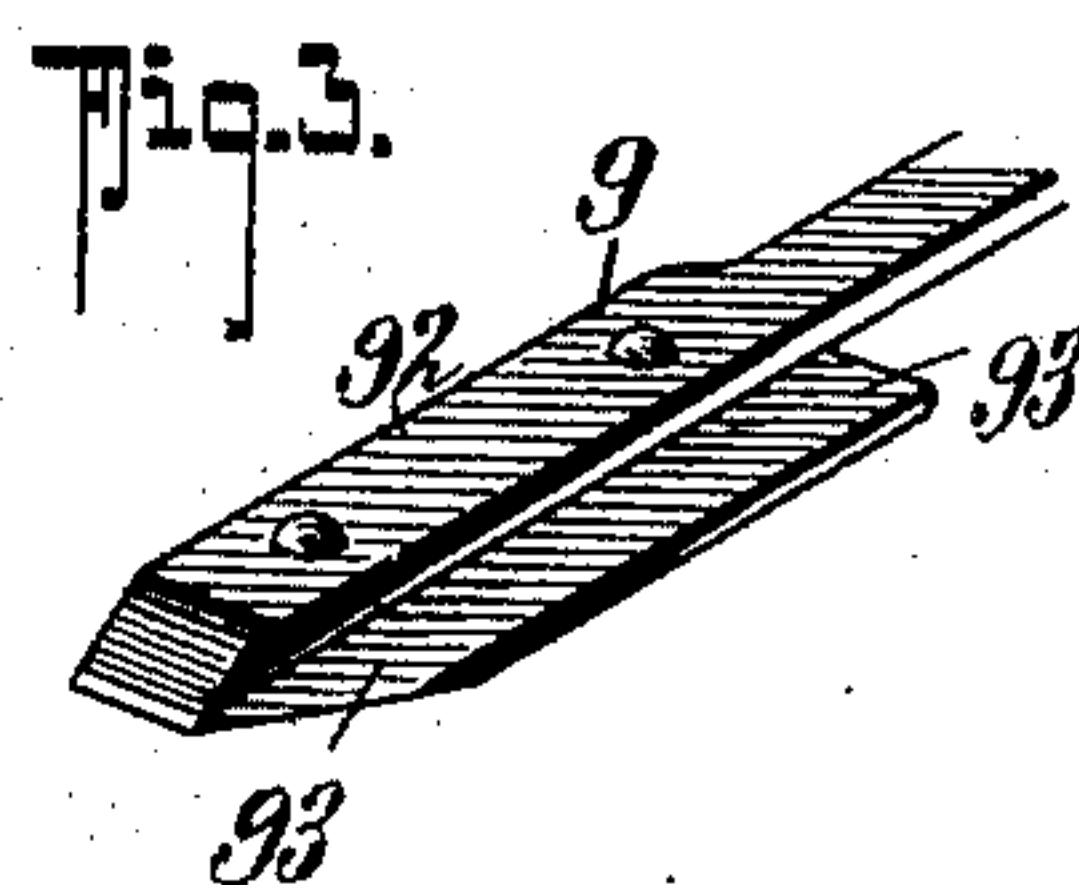
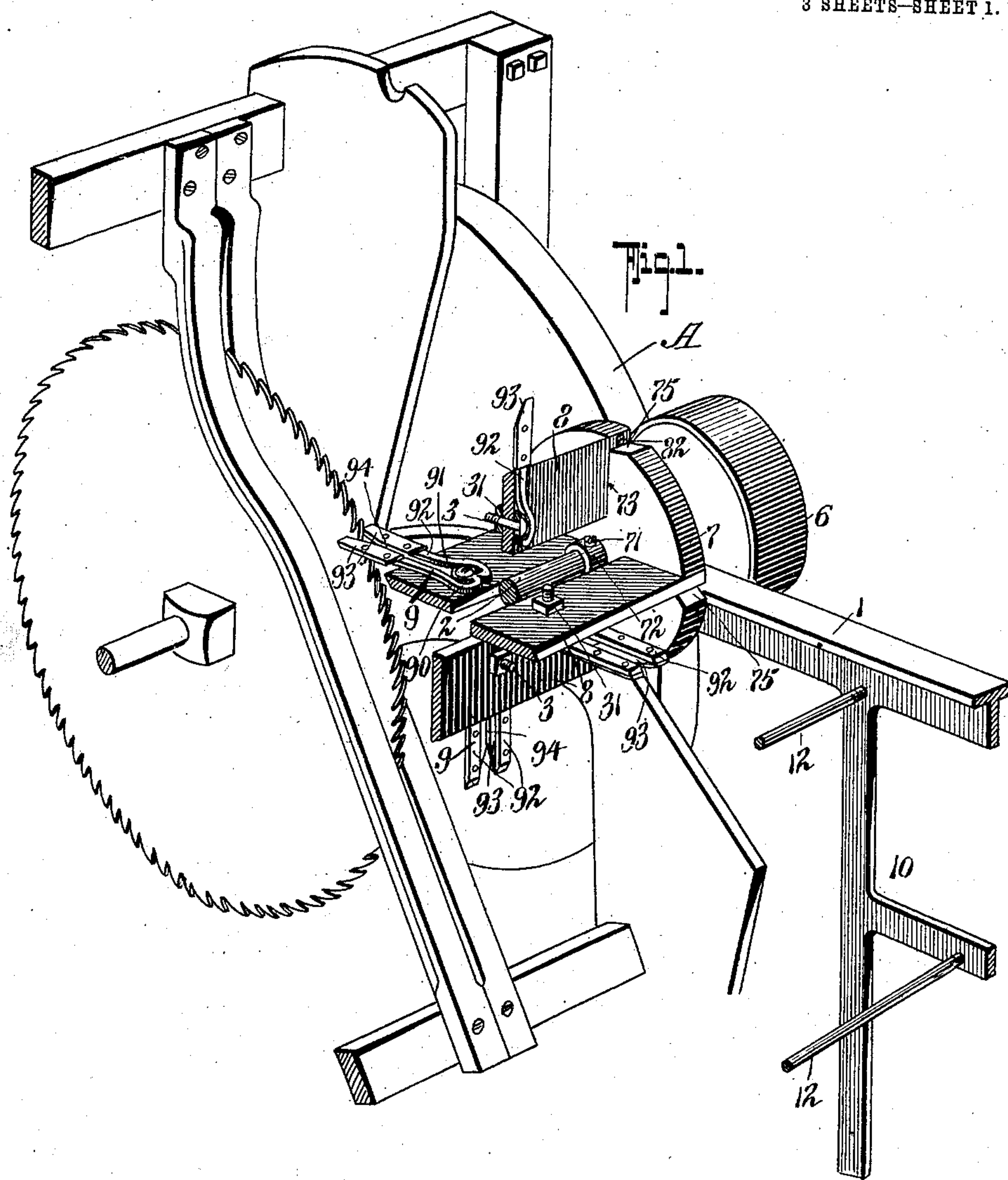


A. B. BLACK.
 PORTABLE GIN SAW CLEANER.
 APPLICATION FILED SEPT. 18, 1909.

985,137.

Patented Feb. 28, 1911.

3 SHEETS—SHEET 1.



WITNESSES:
H. Woodard
Eleanor Macbarnick

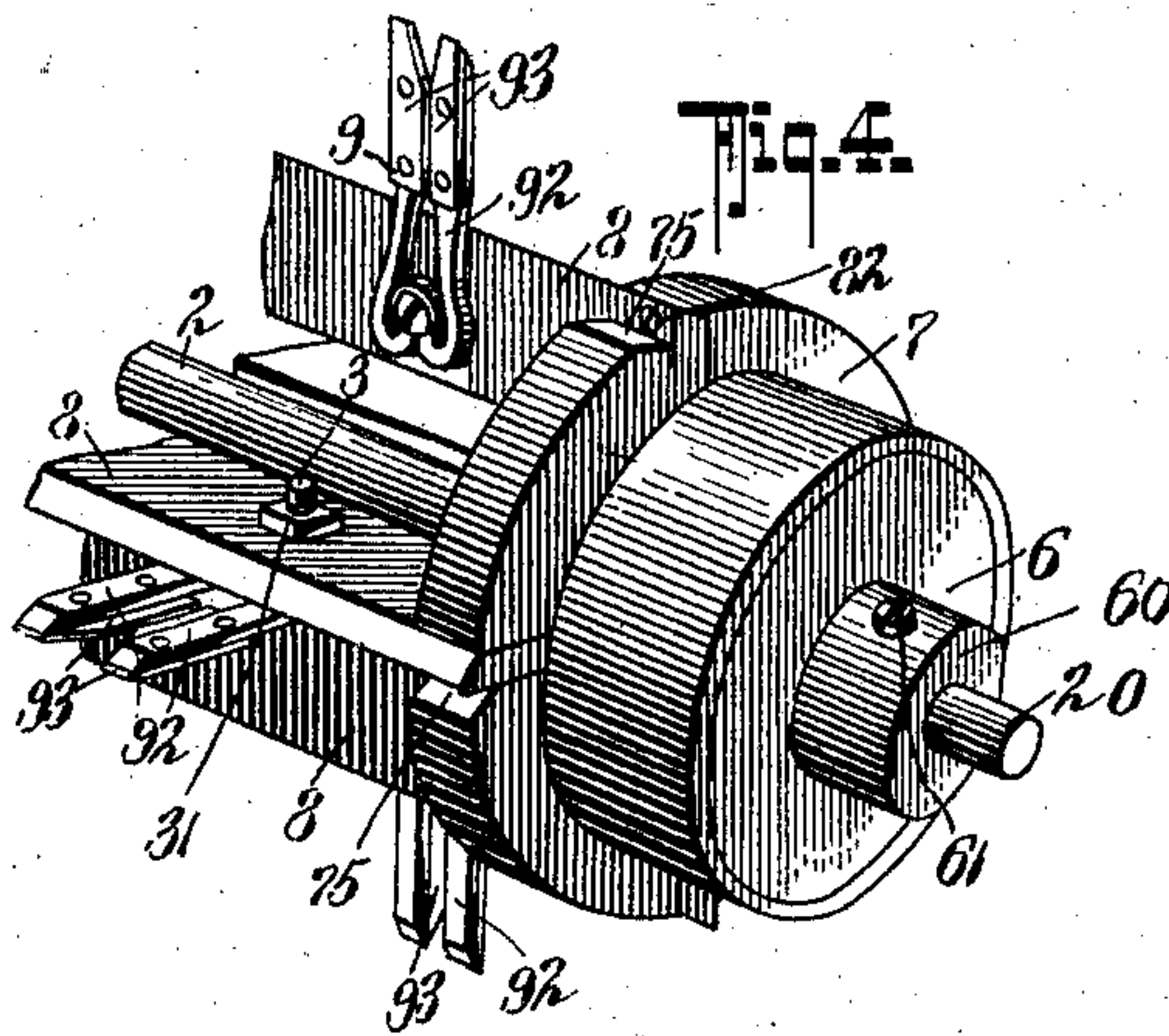
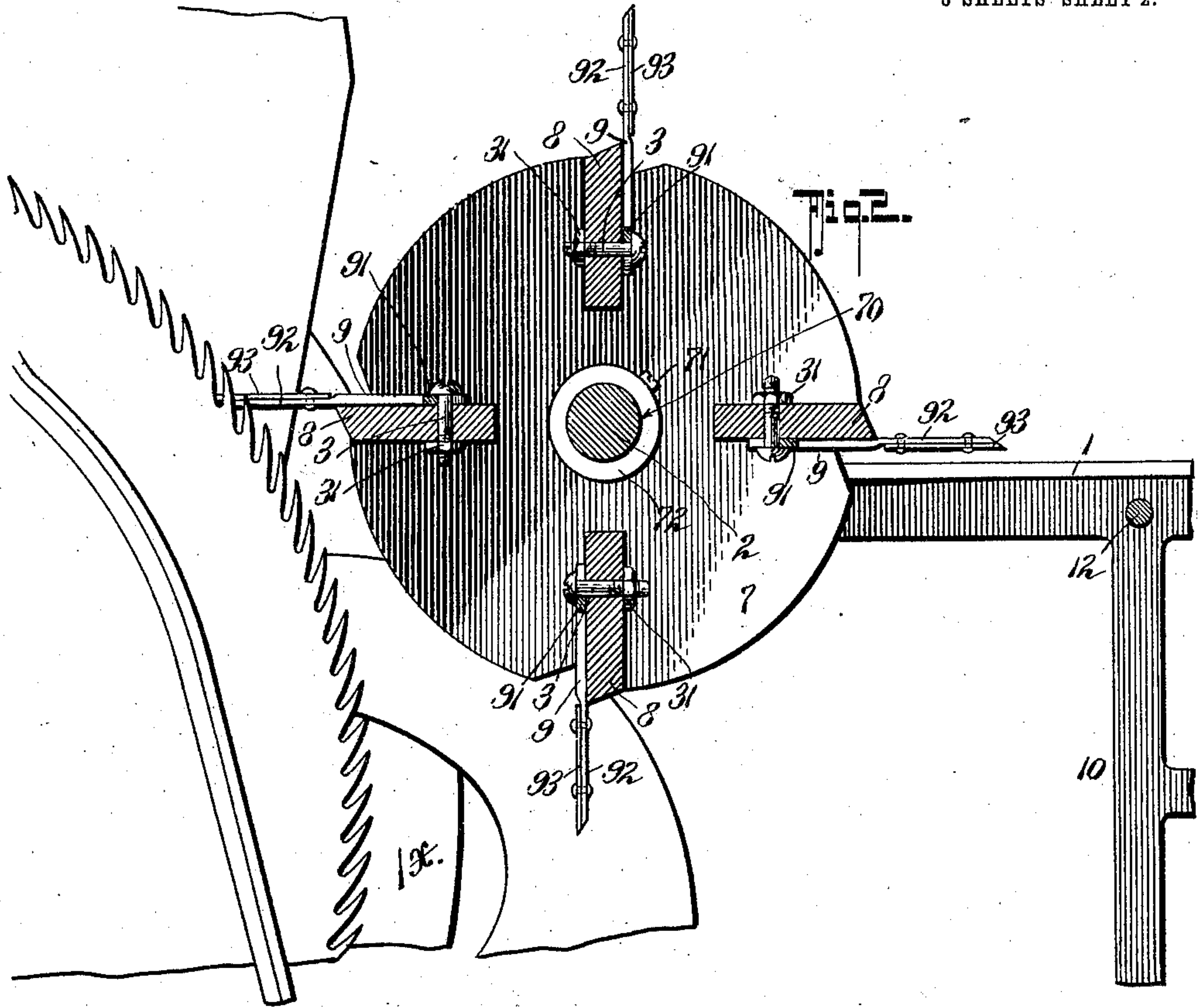
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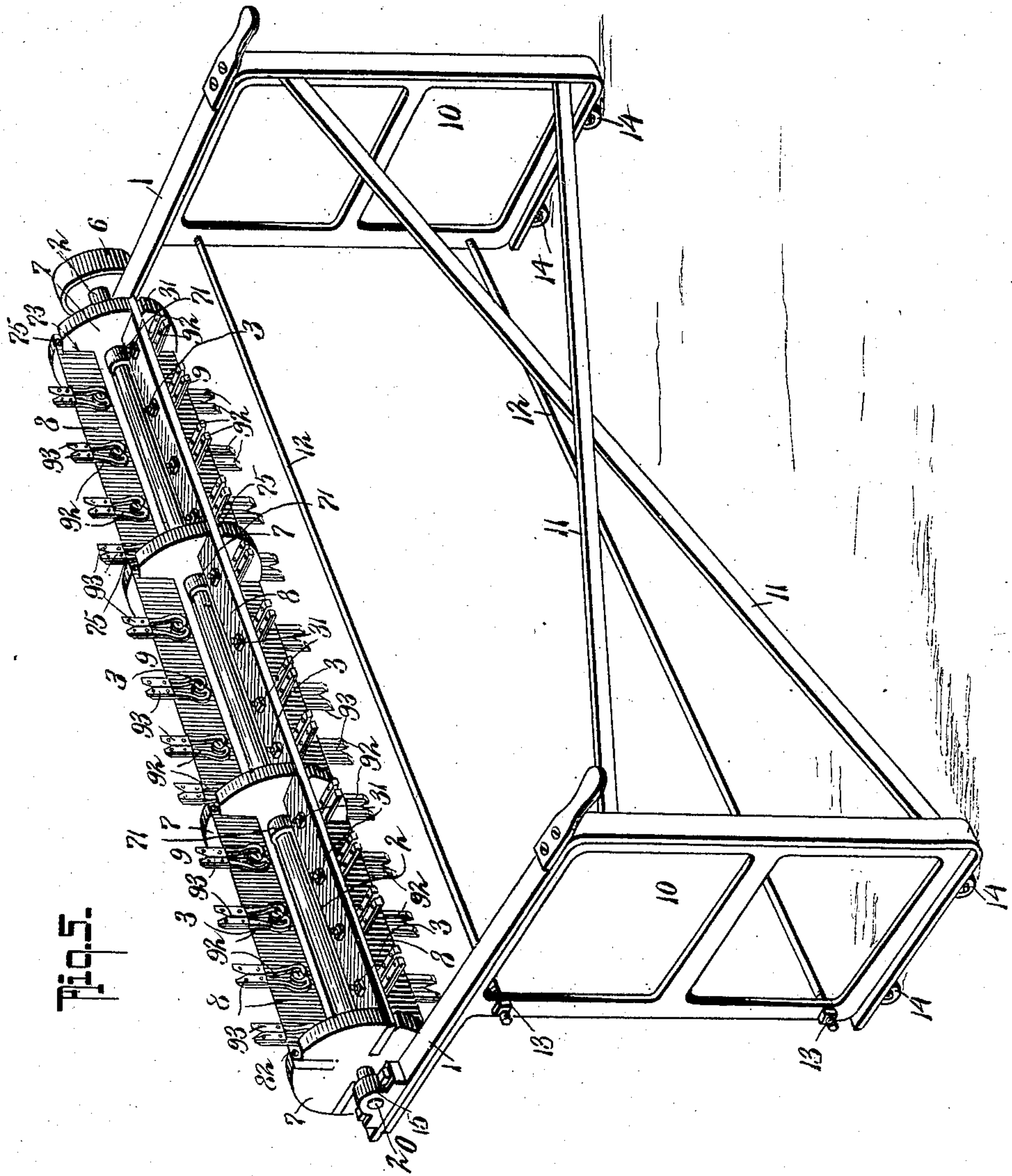
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UNITED STATES PATENT OFFICE.

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PORTABLE GIN-SAW CLEANER.

985,137.

Specification of Letters Patent.

Patented Feb. 28, 1911.

Application filed September 18, 1909. Serial No. 518,359.

To all whom it may concern:

Be it known that I, AMBROSE B. BLACK, residing at Lexington, in the county of Cleveland and State of Oklahoma, have invented a new and Improved Portable Gin-Saw Cleaner, of which the following is a specification.

Heretofore in the application of devices to cotton gins especially adapted for cleaning and stripping the saws of damp, wet or frost bitten cotton, such devices have generally been fixedly held on the gin frame or have been specially constructed to operate in connection with a particular style or size of gin.

My invention primarily has for its object to provide a gin saw cleaning means of a simple and economical construction capable of being readily operated by unskilled labor and which will effectively serve to simultaneously clean all the teeth of a gin almost instantly when applied thereto.

My invention also has for its object to provide a means for the purposes stated that is portable with respect to the gin and capable of being quickly moved into position to engage with and clean the teeth of a gin without interlocking it with the gin mechanism further than making frictional contact with a driving member of the gin, and which can be instantly backed away from the cleaned teeth and conveyed, without special adjustment or loss of time in fitting, to engage with and clean another set of gin saws and which, with but a slight shifting of the means for driving the shaft of the cleaner devices can be adapted for use in connection with different sizes of the standard types of cotton gins.

With the above and other objects in view, my invention comprehends a portable gin saw cleaning means that comprehends the peculiar and novel arrangement and combination of parts, all of which will be hereinafter fully described, specifically pointed out in the claims and illustrated in the accompanying drawings, in which,

Figure 1, is a perspective view of one end of a standard type of cotton gin, and so much of my cleaner devices necessary to illustrate the practical application thereof.

Fig. 2, is a side elevation and part cross section of the invention showing the parts illustrated in Fig. 1. Fig. 3, is a perspective view of one of the wiper or cleaner shears and a portion of the blade on which it is mounted. Fig. 4, is a perspective view of one end of the wiper or shear carrying rotary head. Fig. 5, is a perspective view of my portable gin saw carrying cleaner mechanism.

In the practical application of my invention, I provide a suitable main frame comprising two end members 1—1 cast or otherwise formed of metal, each of which is mounted on a pair of frames 10—10 joined by cross braces 11—11, see Fig. 5, by reference to which it will be also seen the two sets of end frames are further braced by the longitudinal rods 12—12 whose threaded ends pass through the frames and engage with the clamp nuts 13—13, the several parts forming a light but substantial frame, which by reason of being mounted on casters 14—14 as shown, can be quickly moved into and out of an operative position as will hereinafter more fully appear. It should be stated that the end frames can be held separated to the distance desired for accommodating the length of cleaner head required for the particular type of gins that may be used at the gin house.

On each end member 1 is mounted a boxing 15 15 to receive the journals 20 of the cleaner head, the specific construction of which forms one of the features of my invention.

Shaft 2 that extends the full length of the cleaner machine has bearing at its ends only, and on this shaft near one end is adjustably mounted a friction disk 6 having a periphery of yielding material, for example, rubber, the purpose of which will presently appear, the adjustability of said disk being provided for by forming it with a hub 60 to receive a set screw 61 that clamps it on this shaft 2. Mounted on the shaft are four, more or less, disks 7, each of which has hubbed aperture 70 whereby it is slidably mounted on the shaft 2 and on which it is held by a set screw 71 mounted on the hub 72 as shown. Each disk 7 has a series of radial notches 73, four being

shown, that form the seats for a series of flat steel plates 8—8 that extend from one end head disk to the other end disk and which carry the wiper or shear members 9, of which in the practical arrangement there is one for each gin saw. The several plates 8 are firmly held in the sockets of the heads 7 by forming the heads with notches 75 to accommodate the application of clamp screws 82, as clearly shown in the drawings.

The wiper or cleaning shears 9 before referred to, one of which is shown in detail on Fig. 3, each consist of a thin spring steel bar that is bent upon itself midway thereof as at 90 and inwardly to form a loop 91 for receiving the shank of a screw bolt 3 that passes through plate 8 and receives the clamp nut 31. The bar 9 has a loop 91 at the center and has its ends projected to form extensions 92 that project beyond the outer edge of the bar to form the support for opposing wiper or shear members 93 in the nature of thin flat blades that are riveted to the extensions 92, as clearly shown in Fig. 3 by reference to which it will be seen the adjacent edges of the blades 93 form an elongated slot 94 of a width substantially the thickness of the saw blades so that in passing over the blades the inner front edges will scrape against the sides of the saw teeth and brush or clean off any of the lint that hangs thereon. To facilitate the proper straddling of the wipers over the saw edges the said inner front of the blades 93 are beveled to form a tapering throat.

From the foregoing, taken in connection with the accompanying drawings, the complete construction, the manner in which my improvement can be operated and its advantages will be readily apparent to those skilled in the art to which it appertains.

When it is desired to clean a gin the hinged casing members of the gin are thrown back to expose the saws, see for example Fig. 1. My portable cleaner is then moved into position so the end bars 1—1 will straddle the ends of the gin casing, it being understood that the journal ends of the shaft 2 are sufficiently longer than the wiper carrying heads to permit of shoving the wiper head close up against the gin saws, and the rubber covered disk up against the pulley A on the gin saw shaft, from which, by reason of the frictional contact of disk 6 and pulley A, motion is imparted to the rotary wiper heads, the said heads and the disk 6 being manually held up in position, the portable frame having suitable handles for the operators holding it, it being obvious that after pushing the cleaner into an operative connection with the saws the cleaner frame may be mechanically fixedly held in position. After the saws have been wiped, which op-

eration is almost instantaneous, the cleaner frame is then moved away on its rollers and if desired, can be quickly adjusted to operate on another gin.

By mounting the wiper or shear devices as shown and described, in case of breakage new ones can be easily substituted, and in the event of one of the bars 8 breaking it can be conveniently removed from the head disks and replaced by another.

Having thus described my invention what I claim is:

1. In a gin saw cleaner, a portable frame having projecting members for straddling the ends of the saw holding casing of a gin, bearings on the ends of said members, a shaft mounted in said bearings, a set of disks mounted on said shaft and spaced apart, each of said disks having radial sockets or slots, bars held in said slots and extending from one end disk to the disk at the other end of said shaft, means for securing said bars to said disks, a set of resilient bars secured to each of said disk carried bars, and projecting beyond the edge of the same, shear members secured to the projecting ends of said resilient bars to straddle the gin saws, and means on said shaft to engage a moving part of said gin to impart motion to said shaft.

2. A gin saw cleaner including a portable frame having projecting members for straddling the ends of the saw holding casing of a gin, said gin having a saw carrying shaft and a wheel on said saw carrying shaft, a cleaner shaft mounted in bearings in the projecting members of said portable frame, a pair of end disks secured to said last named shaft, said end disks having radial slots, bars held in said radial slots parallel with said last named shaft, gin saw cleaners carried by said bars and having portions for straddling and engaging said saws, a friction disk on said last named shaft for engaging said wheel on said saw carrying shaft, substantially as shown and described.

3. A gin saw cleaner including a portable frame having projecting members for straddling the ends of the saw holding casing of a gin, said gin having a saw carrying shaft and a wheel on said saw carrying shaft, a cleaner shaft mounted in bearings in the projecting members of said portable frame, a pair of end disks secured to said last named shaft, said end disks having radial slots, bars held in said radial slots parallel with said last named shaft, gin saw cleaners carried by said bars and having portions for straddling and engaging said saws, a friction disk on said last named shaft for engaging said wheel on said saw carrying shaft, said gin saw cleaners consisting of an individual cleaner for each saw and compris-

ing a bar bent into a central loop portion
and then bent back upon itself to form arms
that project beyond the edge of said disk
carried bars, means passing through said
5 loop portion for securing said gin saw clean-
ers to said disk carried bars and wiper
blades secured to the projecting ends of said
cleaner bars to straddle and engage the re-
spective saws.

AMBROSE B. BLACK.

Witnesses:

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J. E. PETERS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."
