

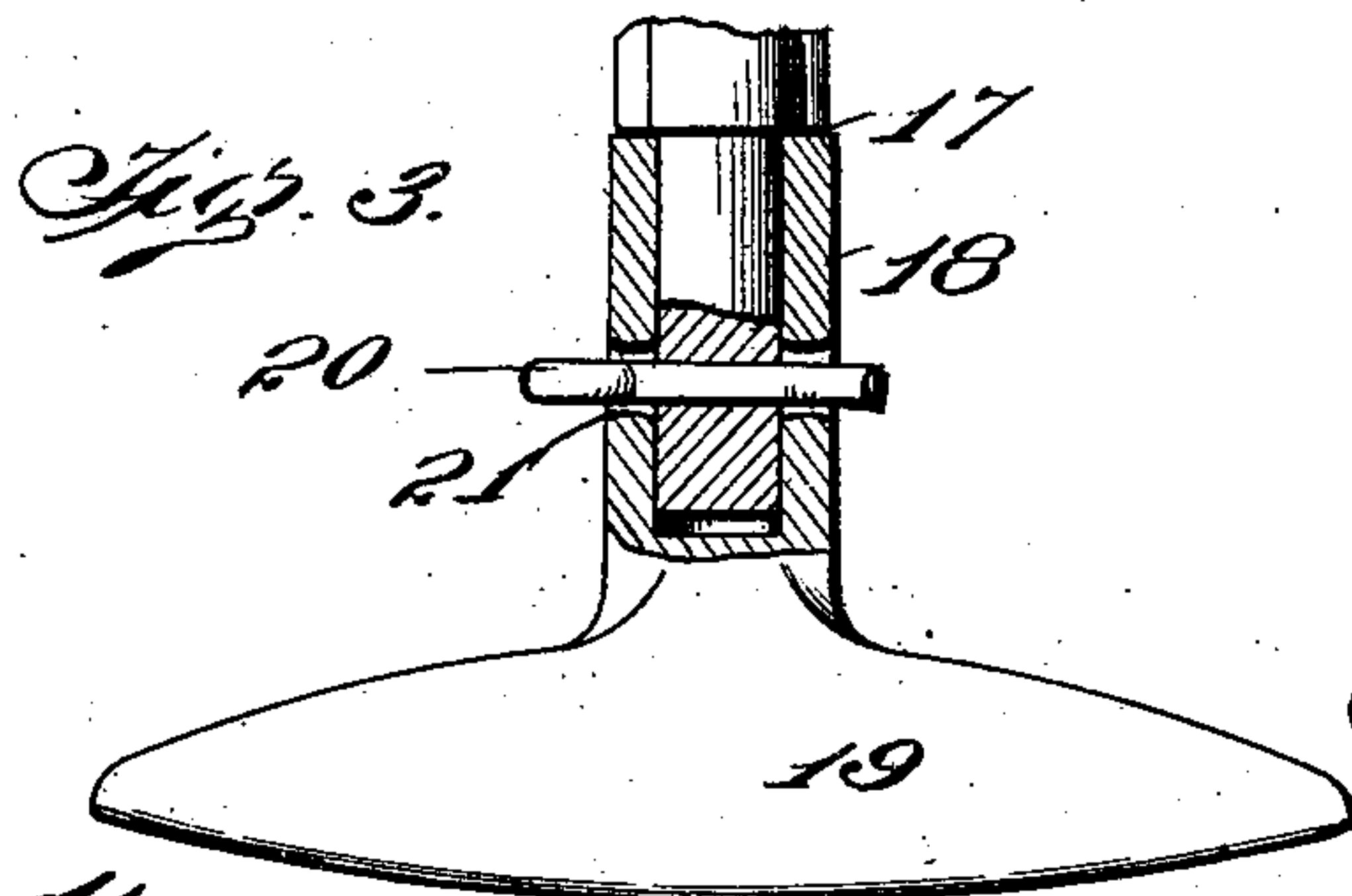
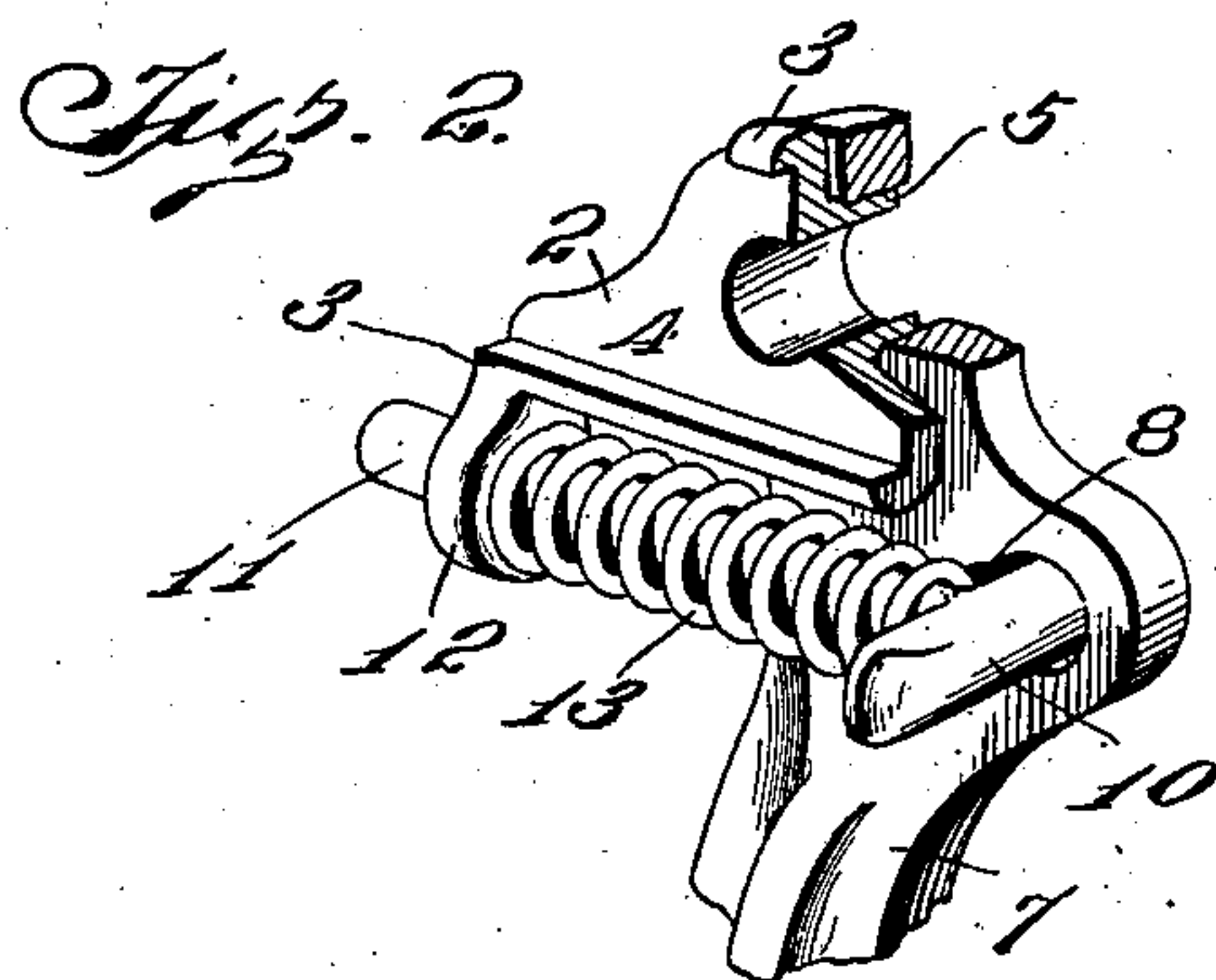
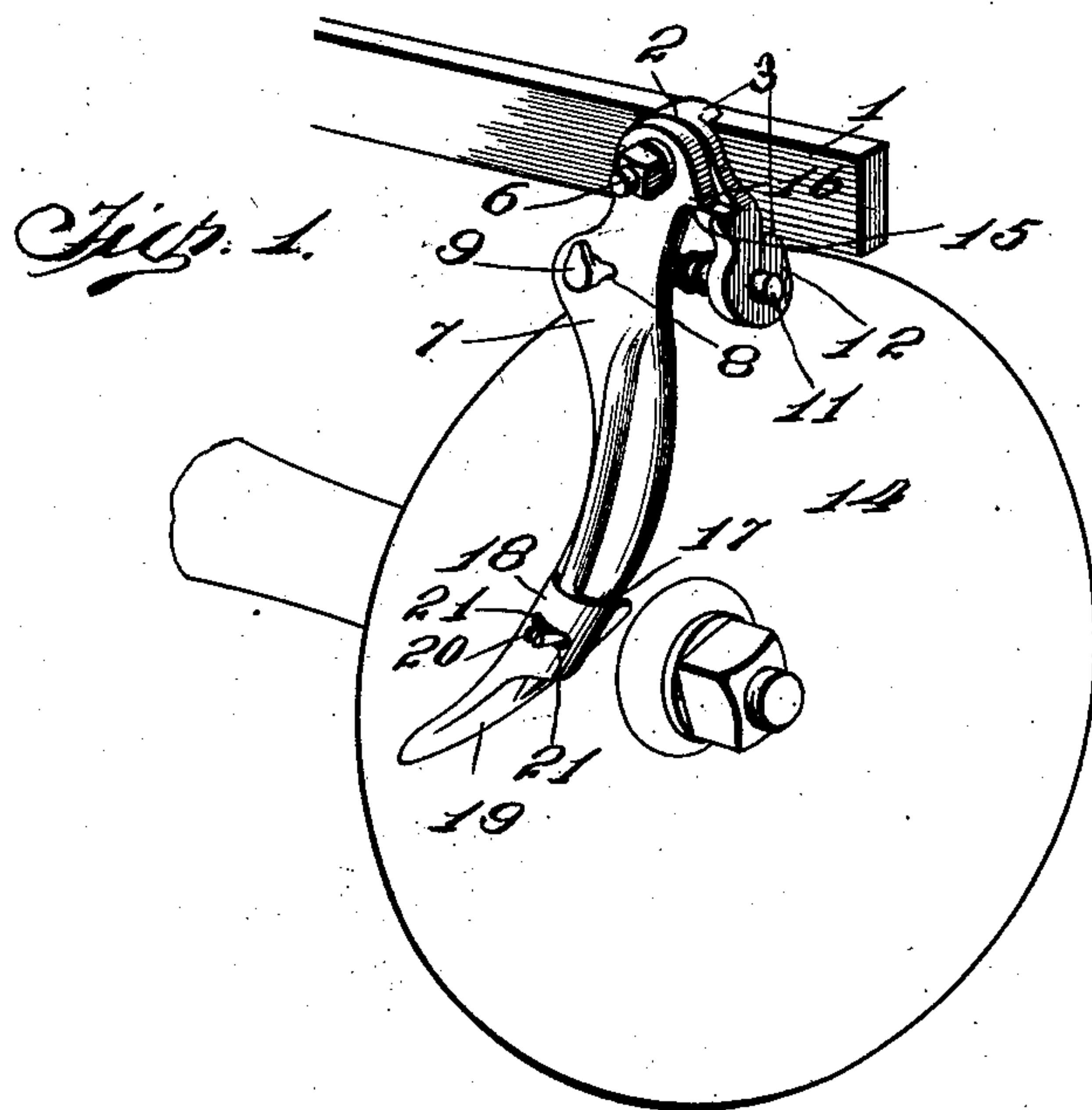
No. 756,107.

PATENTED MAR. 29, 1904.

W. FETZER.
DISK SCRAPER.

APPLICATION FILED APR. 10, 1903.

NO MODEL.



Witnesses

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DISK-SCRAPER.

SPECIFICATION forming part of Letters Patent No. 756,107, dated March 29, 1904.

Application filed April 10, 1903. Serial No. 152,023. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM FETZER, a citizen of the United States, residing at Middletown, in the county of Butler and State of Ohio, have invented certain new and useful Improvements in Disk-Scrapers; and I do hereby 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.

The present invention relates to improvements in disk-scrapers, and particularly to that type designed to automatically accommodate themselves to the contour of the disk.

The object in view is the provision, in combination with the disks of a disk harrow, of means for removing foreign matter therefrom and capable of automatic adjustment for accommodating itself to unevenness of the disk, while effectually preventing the retention thereby of foreign substances.

With these and other objects in view the invention consists, in combination with a disk, of a scraper mounted so as to be rockable on a substantially vertical shaft and contacting with said disk and means for cushioning such contact.

It also consists, in combination with a disk and harrow-beam, of a standard pivotally connected therewith, a sleeve inclosing the lower end of said standard, and a scraper carried by said sleeve contacting with said disk.

It further consists in certain other novel constructions, combination, and arrangement of parts, as will be hereinafter fully described and claimed.

In the drawings, Figure 1 represents a perspective view of a disk-scraper embodying the features of the present invention. Fig. 2 represents an enlarged detail fragmentary perspective view of the upper end of the scraper standard and connection, parts being broken away for disclosing interior structure. Fig. 3 represents an enlarged detail view, partly in elevation and partly in section, of the scraper proper, the standard being partly broken away.

In the use of disk harrows and other disk implements it is found desirable to retain the

disks as free from foreign substances as possible, and in order to accomplish this result I employ, as seen in the accompanying drawings, any suitable support 1—in this particular instance illustrated being the harrow-beam—to which is secured an attaching-plate 2, formed on one side with parallel upper and lower flanges 3 3, designed to extend beyond the upper and lower edges of beam or support 1, the flat surface 4 between said flanges lying flat against the flat face of said beam. The plate 2 is formed with a sleeve 5, extending laterally therefrom and bored centrally for the reception of a retaining-bolt 6, extending therefrom and through the support or beam 1. The sleeve 5 is surrounded by and forms a bearing for a standard 7, which standard is formed with a keyhole-slot 8 for permitting the passage of a key-head 9, formed on a bar 10, extending in a horizontal plane transverse the vertical plane of the standard 7. Extending at a right angle from and preferably formed integral with the bar 10 is a bolt 11, which extends through an aperture formed in an eye 12, extending from plate 2, a suitable spring 13 surrounding said bolt 11 and contacting with eye 12 at one end and bar 10 at the other, said bar serving as a head for said bolt, whereby the pressure of spring 13 effects the standard 7 for directing the same toward the disk 14, arranged beneath the beam 1. A lug 15 projects laterally from plate 2 and normally contacts with a shoulder 16, formed on the upper end of standard 7, whereby the movement of standard 7 toward the disk 14 is limited, while said standard is left free to swing in the opposite direction against the pressure of the spring 13. At the lower end of the standard 7 the same is reduced and formed with an annular shoulder 17, and the reduced portion of the standard is inclosed by a sleeve 18, carrying a suitable scraper-plate 19. The sleeve 18 is supported in position by means of a pin 20 extending through an aperture formed in the lower end of the standard 7 and through slots 21 21, formed in sleeve 18, whereby said sleeve and scraper-plate are left free to rotate through a given arc.

The disks of various types of implements

are often somewhat uneven, and hence the desirability of the provision of means for removing foreign matter therefrom, which means is capable of automatic adjustment and is at the same time positive in its scraping action.

In operation the disk-plate 19 is free to rock upon its standard to accommodate itself to the shape of the disk, while at the same time presenting a sharp cutting-surface designed to remove any foreign substances, and in case of clay or other hard matter clinging to the disk the same will be removed by said plate, the strain upon the plate being received by the standard longitudinally—that is to say, there is practically no lateral strain imparted to the standard by vertically-rising foreign substances contacting with a substantially vertically positioned scraper-plate.

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

1. A disk-scraper comprising a scraper-plate, a rotatably-mounted sleeve carrying the same, a movably-mounted support supporting the sleeve, and means extending through said sleeve for limiting the same in its movement.

2. In a disk-scraper, the combination with a standard, of a sleeve surrounding the same and formed with a slot, retaining means engaging said standard and extending through said

slot, and a scraper-plate carried by said sleeve, substantially as described.

3. In a disk-scraper, the combination with a standard, a sleeve surrounding a portion of said standard and formed with slots in its walls, a pin extending through said standard and through said slot, and a scraper-plate carried by said sleeve, substantially as described.

4. In a disk-scraper, the combination with a suitable support, of a plate carried thereby, a sleeve projecting laterally from said plate, a standard surrounding said sleeve, cushioning means carried by said plate engaging said standard, and a scraper-plate carried by the standard, substantially as described.

5. In a disk-scraper, the combination with a support, of a plate carried thereby, a pivotally-mounted standard, a bar extending transversely through said standard, a bolt carried by said bar, an eye on said plate slidably surrounding said bolt, a spring interposed between said eye and bar, and scraping means carried by said standard, substantially as described.

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

WILLIAM FETZER.

Witnesses:

A. C. FREEZE,

C. R. KENT.