No. 744,416. PATENTED NOV. 17, 1903.

O. J. SCHROETER.

GRATER.

APPLICATION FILED APR. 9, 1903.

NO MODEL. 2 SHEETS—SHEET 1.

Fig. 1.

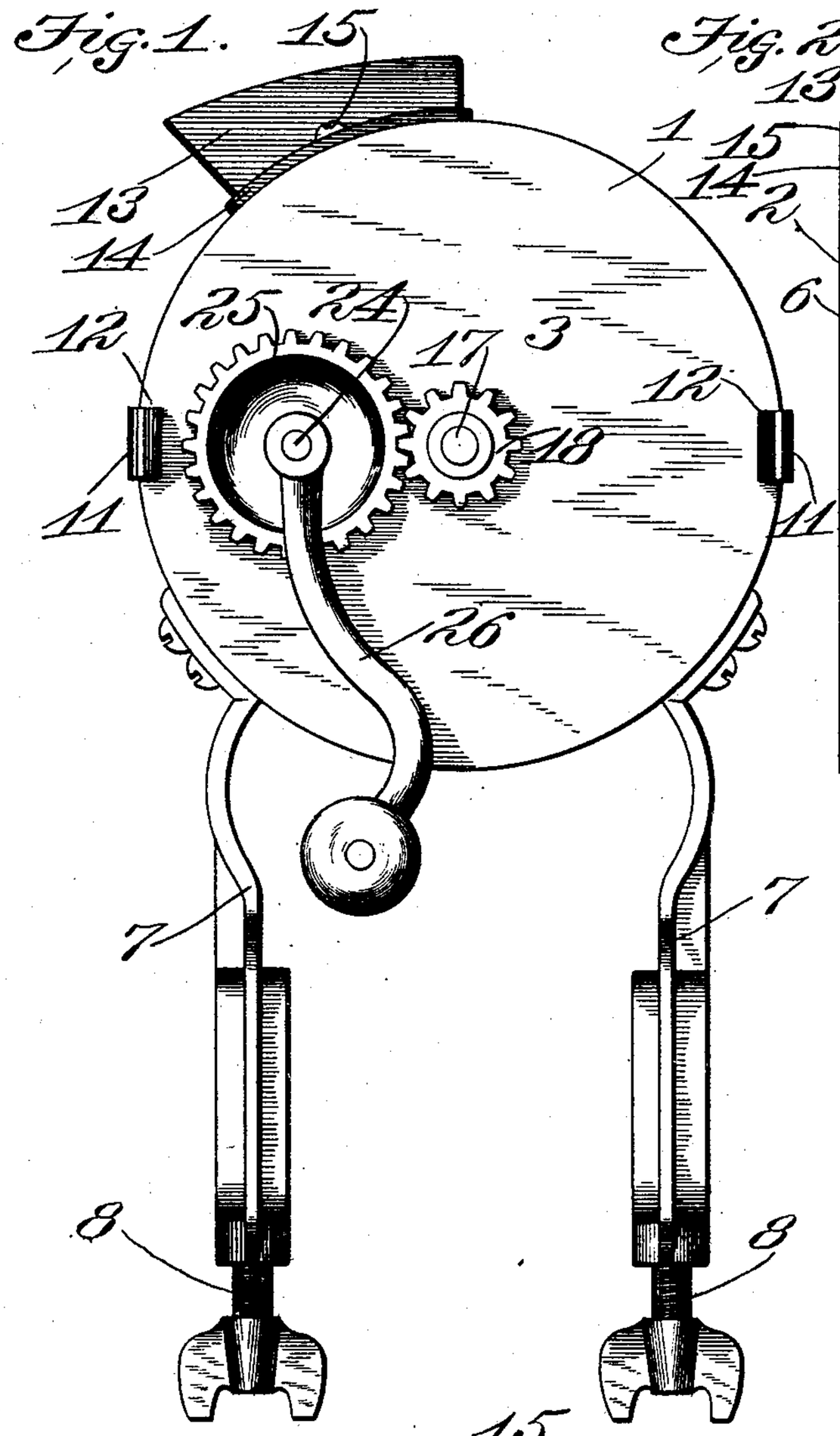


Fig. 2.

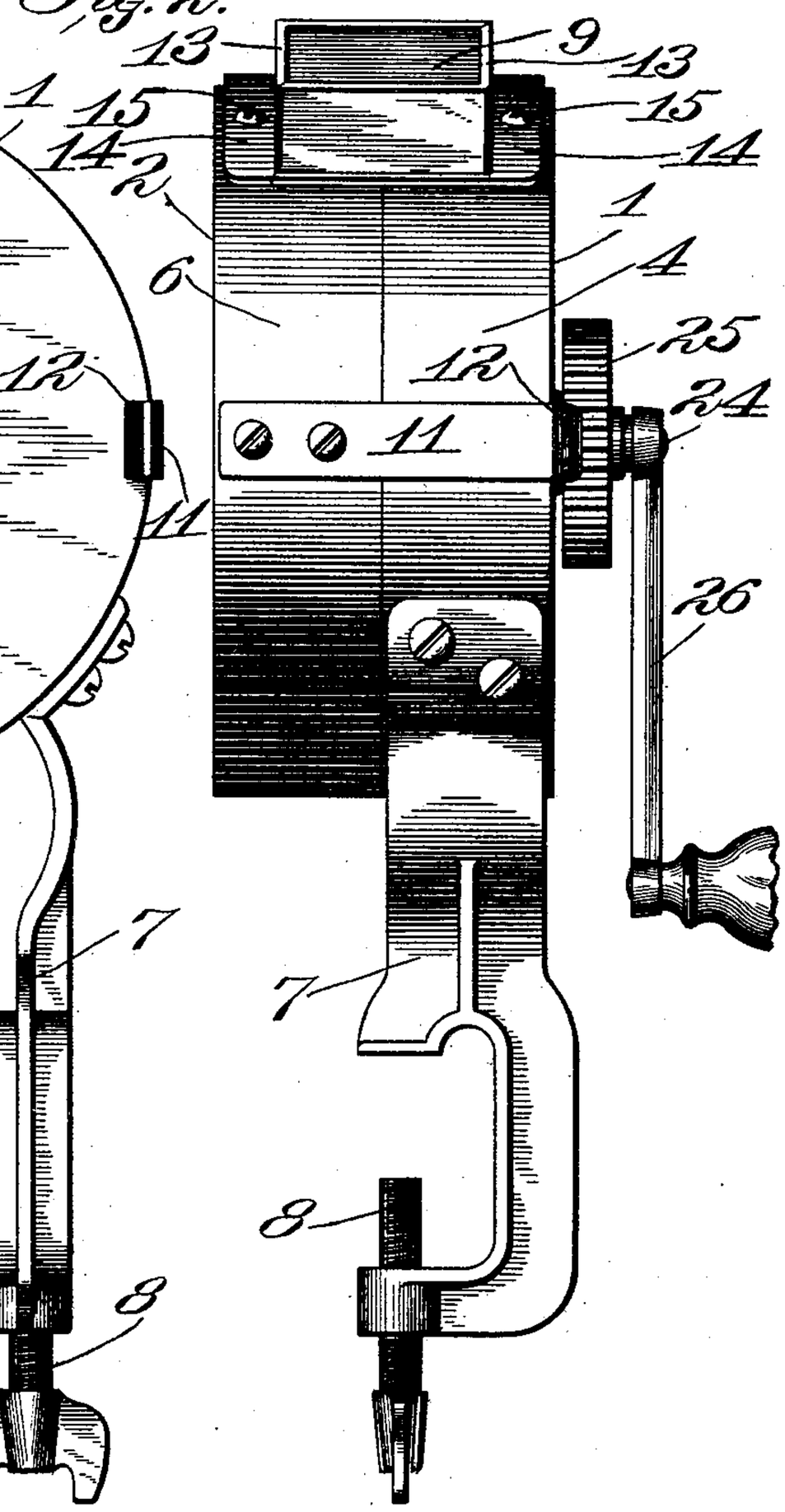
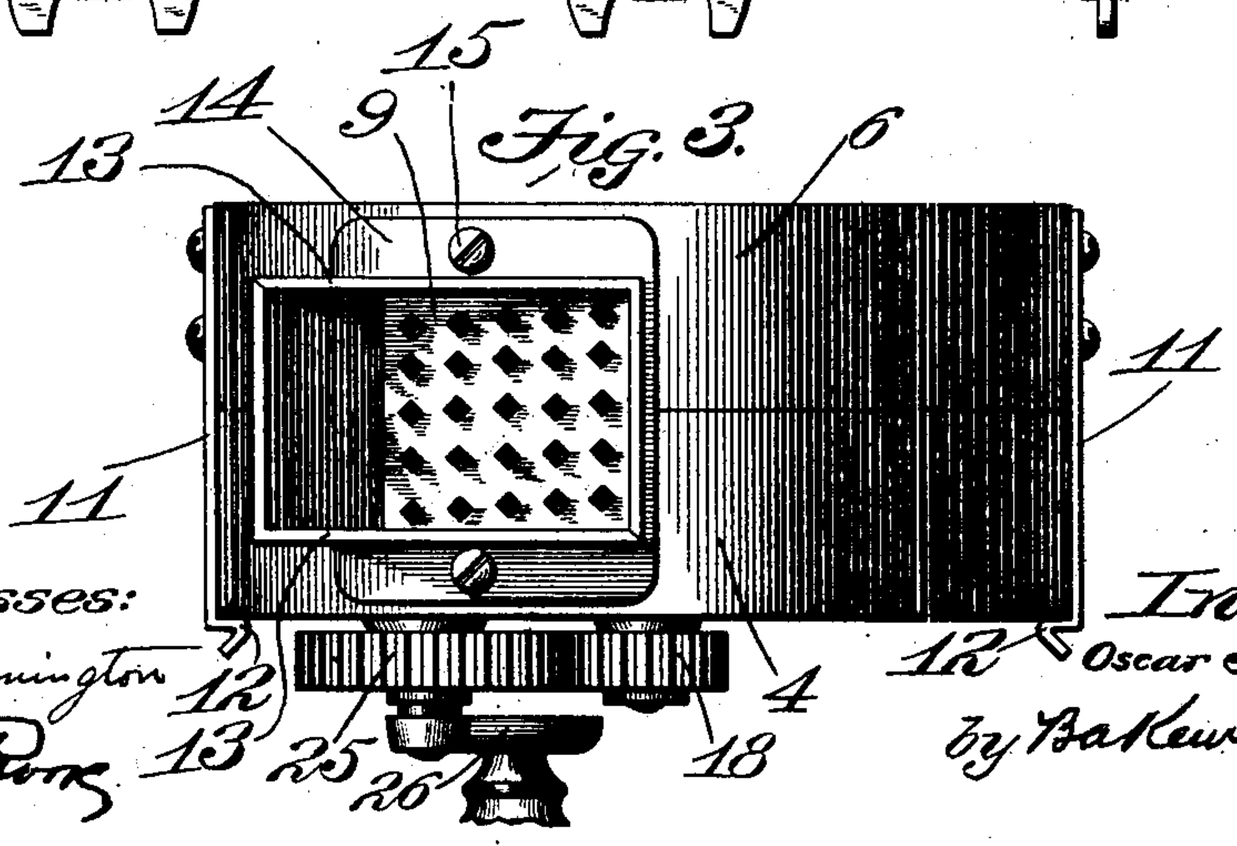


Fig. 3.



Witnesses:

G. A. Pennington

Jules Thorn

Inventor:

Oscar J. Schroeter,

by Bakewell & Cornwall

Attys.

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NO MODEL. 2 SHEETS—SHEET 2.

Fig. 4.

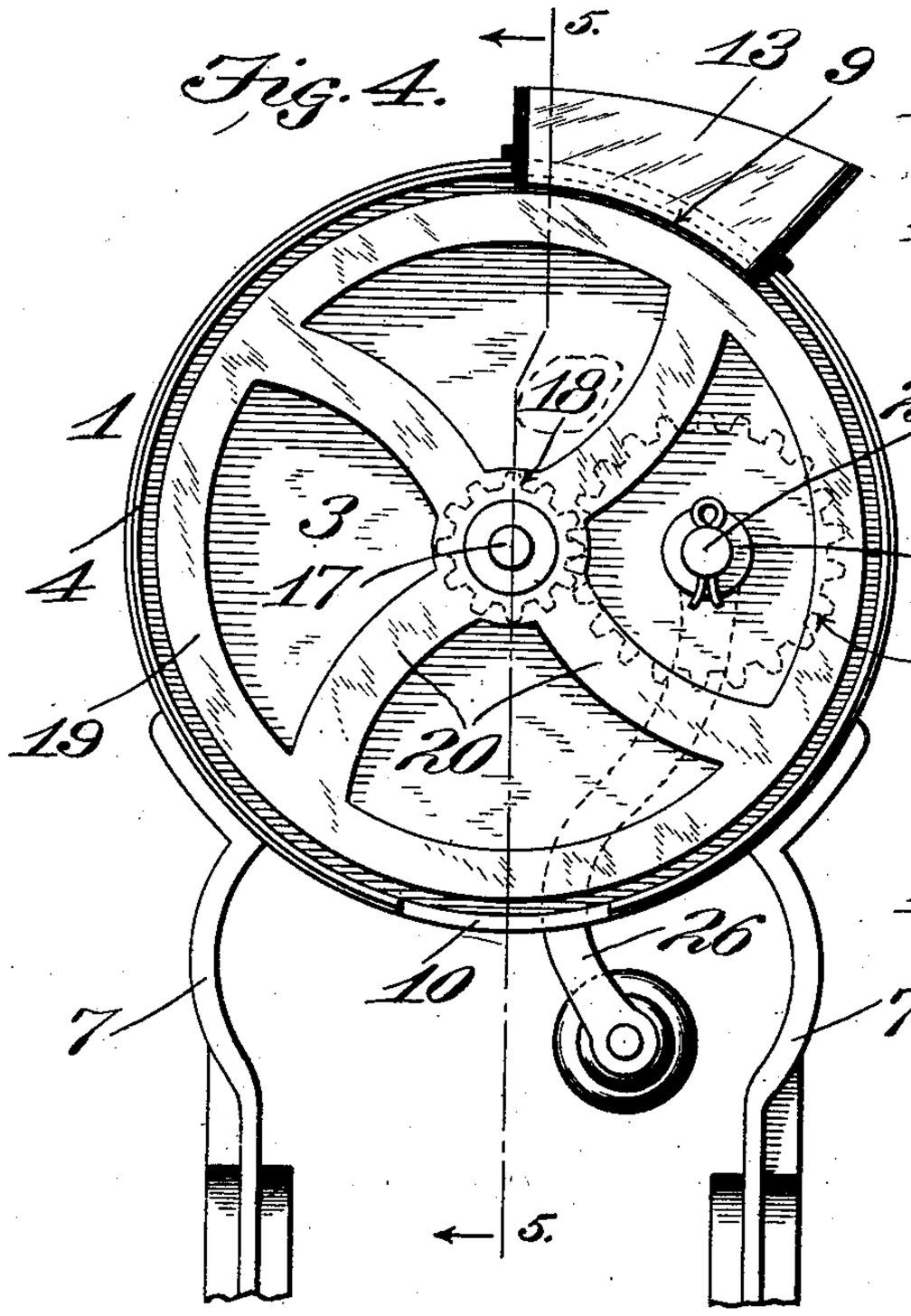


Fig. 5.

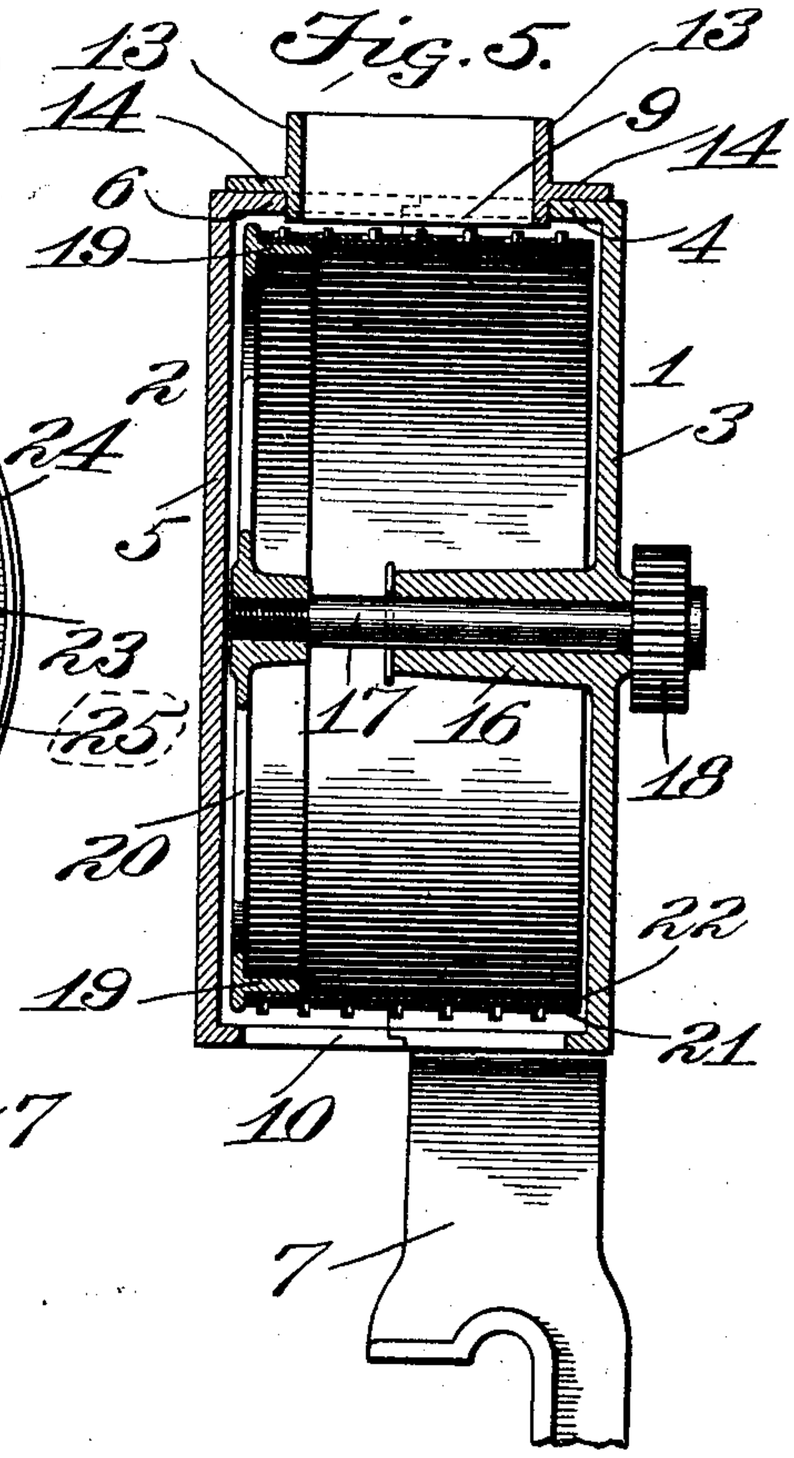
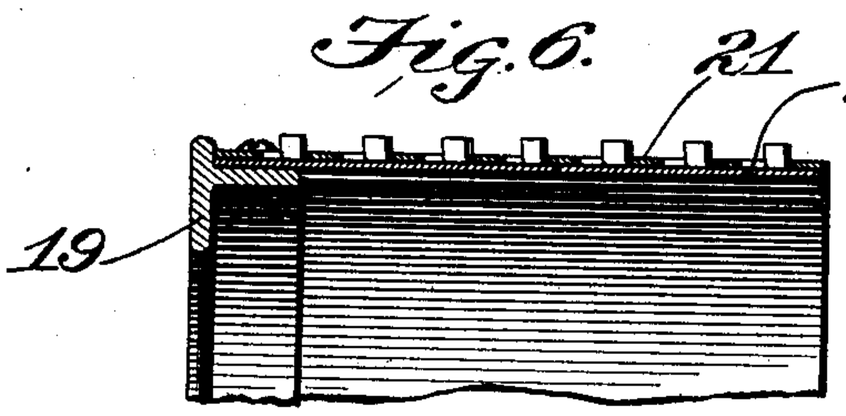


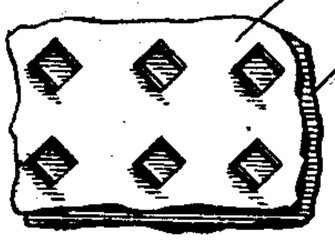
Fig. 6.



Witnesses:

G. A. Pennington

Fig. 7.



Inventor:

Oscar J. Schroeter,

by Bakewell & Cornwall

Attys.

No. 744,416. Patented November 17, 1903.

UNITED STATES PATENT OFFICE.

OSCAR J. SCHROETER, OF ST. LOUIS, MISSOURI, ASSIGNOR TO SCHROETER BROTHERS HARDWARE COMPANY, OF ST. LOUIS, MISSOURI, A CORPORATION OF MISSOURI.

GRATER.

SPECIFICATION forming part of Letters Patent No. 744,416, dated November 17, 1903.

Application filed April 9, 1903. Serial No. 151,879. (No model.)

To all whom it may concern:

Be it known that I, OSCAR J. SCHROETER, a citizen of the United States, residing at St. Louis, Missouri, have invented a certain new and useful Improvement in Graters, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a front elevation. Fig. 2 is a side elevation. Fig. 3 is a top plan view. Fig. 4 is a rear elevation with the rear casing-section removed. Fig. 5 is a transverse sectional elevation on about the line 5 5 of Fig. 4. Fig. 6 is a fragmentary detail illustrating the supporting-ring, the grating member, and the imperforate back plate; and Fig. 7 is a fragmentary detail illustrating the said grating member and its said back plate.

This invention relates to improvements in graters, and more particularly to graters for horse-radish and the like, the object being to provide a simple and inexpensive construction which is efficient in its operation and convenient to use.

To this end and also to improve generally upon devices of the character indicated the invention consists in the various matters hereinafter described and claimed.

Referring now more particularly to the drawings, 1 and 2 represent casing-sections. The section 1 is provided with an end plate 3 and an inwardly-projecting peripheral flange 4, while the section 2, which may be termed the "rear" section, is provided with an end plate 5 and an inwardly-projecting peripheral flange 6, so that when these casing-sections are fitted together they produce a cylindrical operating-chamber. Legs 7, depending from the forward casing-section 1, are provided with clamps 8, by means of which the machine can be secured upon a table or other suitable support in a manner which will be readily apparent.

Each of the flanges 4 and 6 is cut away near its upper portion, so that when the casing-sections are fitted together these openings in the flanges match and produce a feed-opening 9, while a discharge-opening 10 is similarly formed at the lower portion of the casing. The rear casing-section is provided with spring-arms 11, which project forwardly and have inwardly-projecting fingers 12 upon their forward ends, so that the rear casing-section can be readily placed upon the forward section and clamped thereto and can also be readily removed from said forward casing-section. Each casing-section is provided with one-half of a feed-hopper, so that the feed-hopper is produced by two angle members 13, which are brought into proper relation with each other when the rear casing-section is placed upon the forward section. The angle-plates fit within the feed-openings and have outwardly-projecting flanges 14, which rest upon the casing-flanges 4 and 6 and are secured to said casing-flanges in any suitable manner, as by means of screws 15.

Extending inwardly from the center of the casing-plate 3 is an elongated bearing 16, in which is journaled a main shaft 17. A driving-pinion 18 is secured upon said main shaft outside of said end plate 3, and upon the other end of said shaft is a ring 19, supported upon spider-arms 20. A cylindrical grating-plate 21, having its projections formed by perforating the plate in a well-understood manner, is supported upon said ring 19, and an imperforate plate 22 is also supported upon said ring upon the inner side of said perforated grating-plate 21, so that said imperforate plate closes the perforations in the said plate 21. Journaled in the second elongated bearing-sleeve 23 upon the end plate 3 of the forward casing-section is a counter-shaft 24, which is provided with a driving-pinion 25, in mesh with the driving-pinion 18 upon the main shaft, said counter-shaft being also provided with a suitable crank 26.

It will now be readily apparent that horse-radish or the like held in the feed-hopper is grated when the crank 26 is rotated, the grated material passing between the grating-cylinder and the periphery of the casing and falling out of the discharge-opening 10. The rear casing-section 2 is in no manner connected to the grating-cylinder or any of its

operating parts, so that said rear casing-section can be readily removed to permit access to the interior of the apparatus. The castings necessary for the present device can be easily made, and the entire apparatus can be quickly and conveniently assembled.

I am aware that many minor changes in the construction, arrangement, and combination of the several parts of my device can be made and substituted for those herein shown and described without in the least departing from the nature and principle of my invention.

Having thus described the invention, what is claimed as new, and desired to be secured by Letters Patent, is—

In a grater or the like, a casing-section having an end wall and a peripheral flange, a shaft journaled in said end wall, a grating-cylinder carried by said shaft, a second casing-section separable from said first-mentioned casing-section and having an end wall and a peripheral flange which abuts at its inner edge against said first-mentioned flange, spring-arms secured to said flange upon one of said casing-sections and extending across the flange upon the other of said casing-sections, and fingers upon the free ends of said arms and engaging the said end wall of said other of said casing-sections, said flanges being cut away at their meeting edges to produce a feed-opening; substantially as described.

In testimony whereof I hereunto affix my signature, in the presence of two witnesses, this 6th day of April, 1903.

OSCAR J. SCHROETER.

Witnesses:
GALES P. MOORE,
GEORGE BAKEWELL.