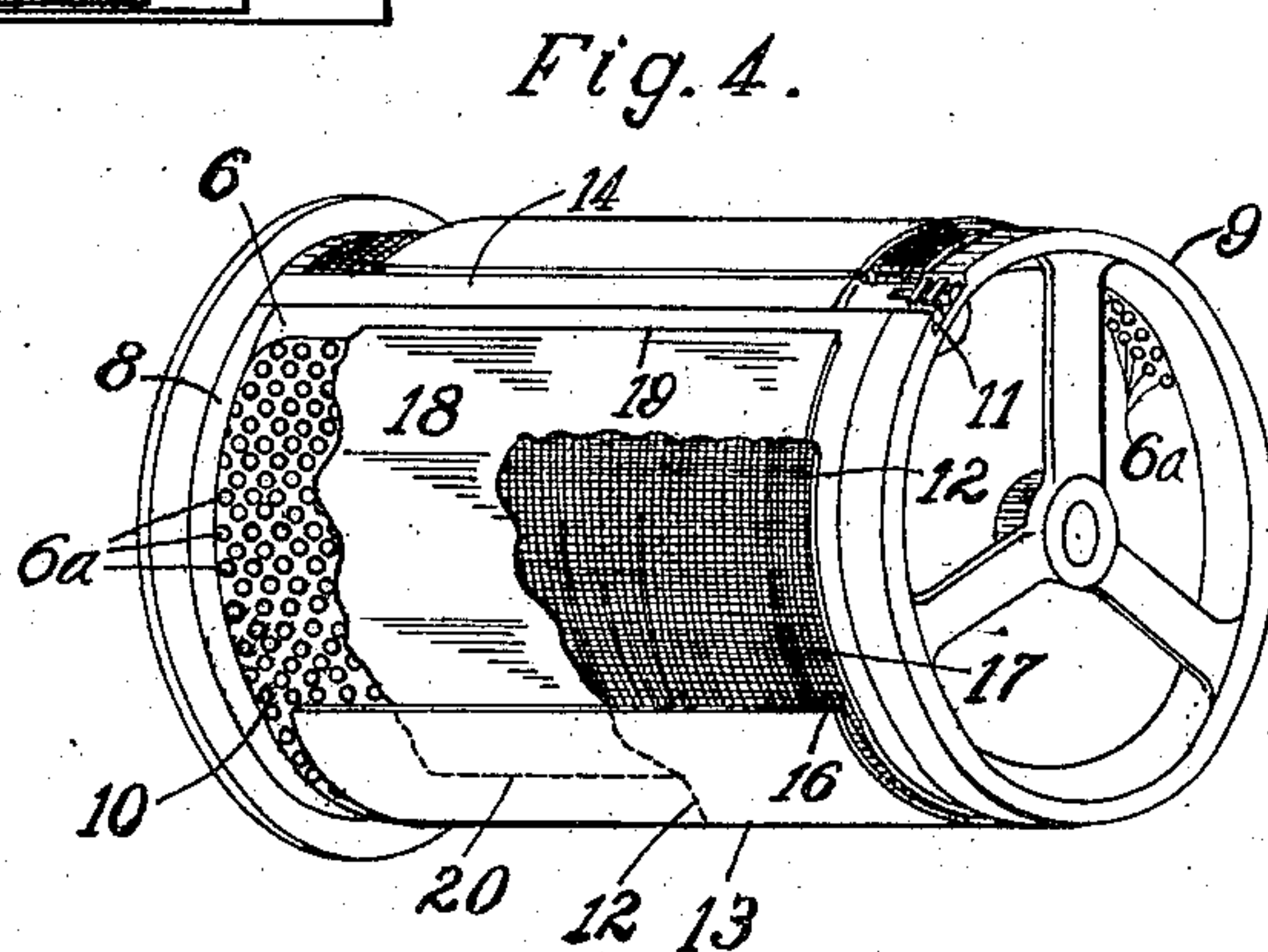
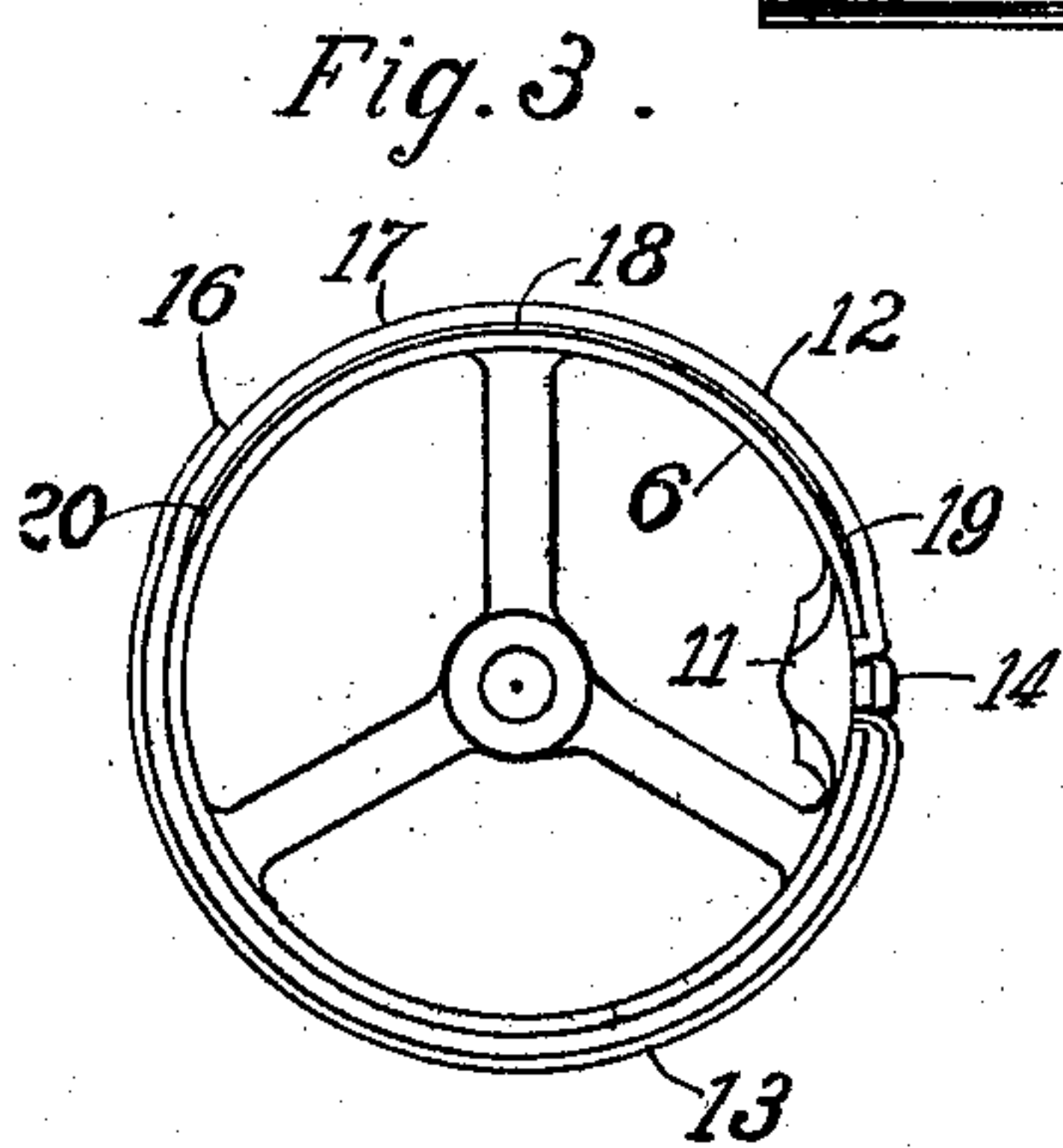
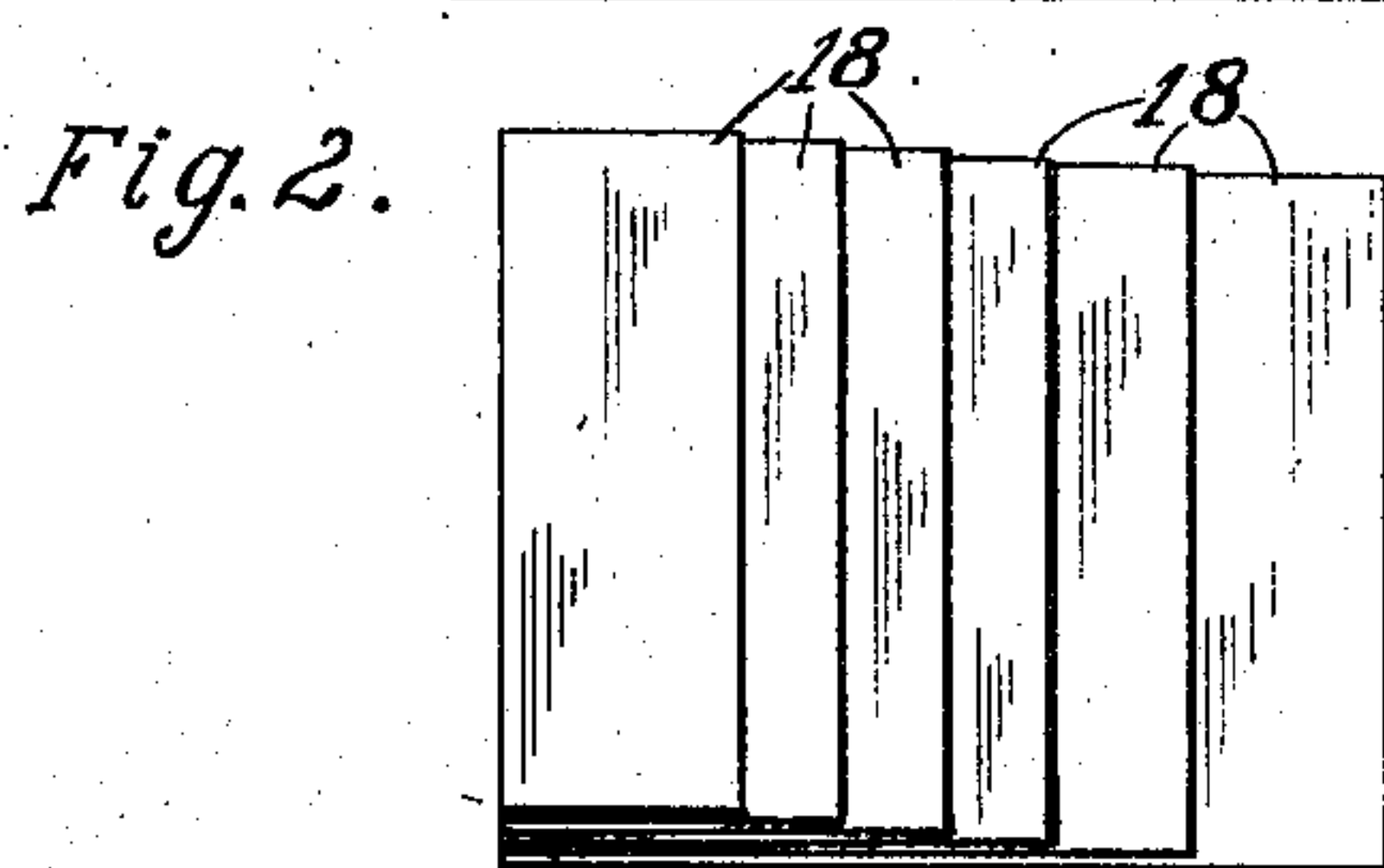
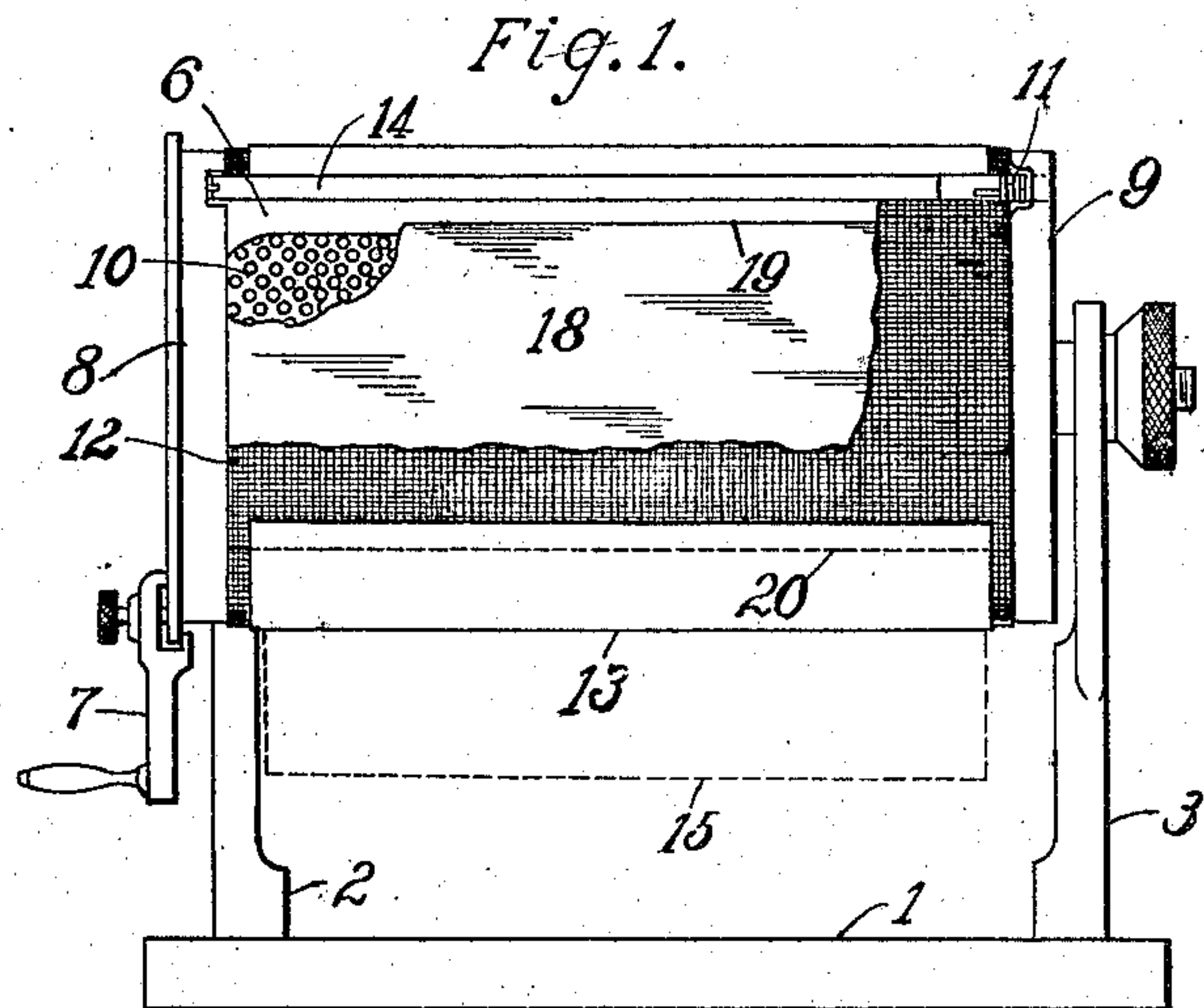


No. 881,448.

PATENTED MAR. 10, 1908.

S. T. SMITH, JR.  
STENCILING MACHINE.  
APPLICATION FILED DEC. 13, 1907.



WITNESSES:

*Ed. Adams*  
*John A. Seifert*

INVENTOR:

*Stephen T. Smith, Jr.*

BY *B. B. Stickney*  
ATTORNEY.



# UNITED STATES PATENT OFFICE.

STEPHEN T. SMITH, JR., OF STAMFORD, CONNECTICUT, ASSIGNOR TO UNDERWOOD TYPE-WRITER COMPANY, OF NEW YORK, N. Y., A CORPORATION OF NEW JERSEY.

## STENCILING-MACHINE.

No. 881,448.

Specification of Letters Patent.

Patented March 10, 1908.

Application filed December 13, 1907. Serial No. 406,255.

*To all whom it may concern:*

Be it known that I, STEPHEN T. SMITH, JR., a citizen of the United States, residing in Stamford, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Stenciling-Machines, of which the following is a specification.

This invention relates to stenciling machines employing a perforated drum or cylinder and impermeable waxed stencil sheet, in which the ink is applied to the inside of the drum and percolates or oozes through the perforations in the drum to saturate a pad wrapped around the drum between the latter and the stencil sheet. The sheets to be stenciled are passed between said drum and a pressure roller, the pressure of the roller squeezing the ink from the pad through the stencil upon the sheets.

Waxed stencil sheets are of varying lengths, according to the amount of matter it is desired to stencil or reproduce, and usually of a length less than the circumference of the drum, so that the ink-pad is not entirely covered. When ink is accidentally dropped upon such part of the cylinder inclosed by the pad which is not covered by the stencil sheet, it will soak through the pad, and come into contact with the pressure roller, depositing ink thereon, and the roller in turn daubs the ink upon the sheets to be stenciled, whereby they are spoiled.

The object of the invention is to provide simple, inexpensive and effective means to prevent ink from getting upon the pressure roller. To this end I introduce a thin sheet of impermeable paper or material, such as celluloid, pyralin or the like, between the drum and that portion of the ink-pad which is not covered by the stencil sheet, thereby preventing access of ink to the unused portion of the pad, so that the pressure roll does not become inked.

In the accompanying drawings, Figure 1 is a front elevation of a stenciling machine with my improvement applied thereto. Fig. 2 shows a set of flexible interponent sheets of assorted lengths. Fig. 3 is an end view of a stencil cylinder, showing diagrammatically the positions of the stencil sheet, ink-pad and impermeable interposed apron. Fig. 4 is a perspective view of a stencil cylinder or drum.

A stencil machine usually comprises a base 1, standards 2, 3, and a cylinder or drum 6 provided with a handle 7. The drum usually comprises a pair of annular heads 8, 9, connected by a hollow cylindrical body of foraminous sheet material 10. Running the length of said drum, is a channel 11. An ink-pad 12 is wrapped around the drum and secured at its ends in the channel 11. A stencil sheet 13 is also wrapped around the drum over the ink-pad, but only partly encircling the drum, and is secured at one end in the channel 11 by a clamping-bar 14. Ink is usually applied to the inside of the drum 6 by means of a brush, and percolates through the perforations 6<sup>a</sup> in the drum to saturate the pad 12. The sheets to be stenciled are fed between the drum 6 and a soft rubber pressure-roller 15, the latter squeezing the ink through the stencil on to the sheets to be stenciled. The waxed stencil sheet is shown extending from the channel 11 to a point 16, (Fig. 4), leaving a portion 17 of the pad exposed. I interpose a sheet of impermeable material 18, such, for instance, as tin, celluloid, pyralin, or the like, between the drum and such portion of the ink pad as is not inclosed by the stencil sheet. Said sheet 18 extends from a point 19 near the channel 11 to a point where it is overlapped by the lower end of the stencil sheet 13, as at 20.

In Fig. 3 is shown diagrammatically the relative positions of the ink pad 12, extending completely around the drum and secured at its ends in the channel 11; the stencil sheet 13, secured at one end in the channel 11 and extending to the point 16, leaving the portion 17 of the pad 12 uncovered; and the impermeable sheet or protecting shield 18, extending from the point 19 to the point 20, where it is slightly overlapped by the stencil sheet 13.

Fig. 2 shows a set of assorted lengths of flexible celluloid sheets, to be used to accommodate or compensate for different lengths of waxed sheets, one of such sets being furnished with each stenciling machine.

Having thus described my invention, I claim:

1. In a stenciling machine provided with a perforated drum, the combination with an ink-pad and a stencil sheet wrapped around said drum, of a sheet of impermeable material interposed between the drum and ink-



pad to cover such perforations in the drum as are out of use.

2. In a stenciling machine provided with a perforated drum, the combination with an ink-pad and a stencil sheet wrapped around said drum, of a flexible sheet of celluloid wrapped around the drum within the ink-pad, and overlapping the lower end of the stencil sheet and covering the remaining perforations in the drum.

3. In a stenciling machine, the combination with a perforated drum, of an ink-pad wrapped around said drum, a stencil sheet wrapped around the ink-pad, but only partly encircling the drum, and a sheet of impermeable material interposed between the drum and ink-pad to cover the perforated portion of the drum not inclosed by the stencil sheet.

4. In a stenciling machine provided with a perforated drum and a pressure-roller, the combination with an ink-pad wrapped around said drum, and a stencil sheet also wrapped around said drum over the ink-pad

but not entirely covering the same, of an impermeable sheet interposed between the drum and such portion of the ink-pad not covered by the stencil sheet to prevent access of ink to the pressure roller.

5. In a stenciling machine provided with a perforated drum having a channel running the length thereof, the combination with an ink-pad wrapped around said drum, the ends of the pad secured in said channel below the printing surface of the drum, of a stencil sheet also wrapped around the drum over the ink-pad but only partly encircling the drum, said stencil sheet secured at one end in the channel by a clamping bar, and a sheet of impermeable material interposed between the drum and the ink-pad and extending from the channel to a point where it is overlapped by the lower end of the stencil sheet.

STEPHEN T. SMITH, JR.

Witnesses:

JOHN O. SEIFERT

K. FRANKFORT.