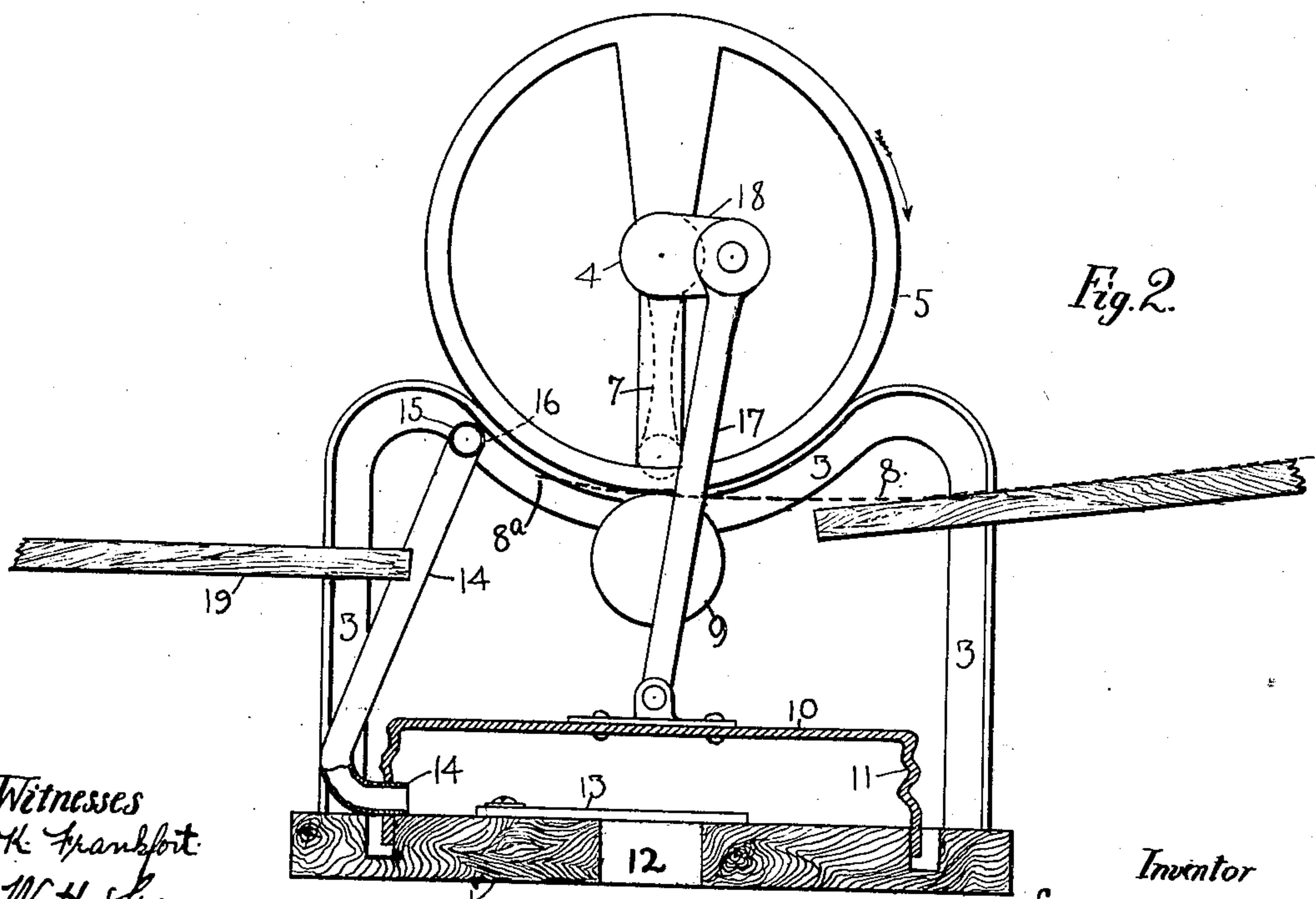
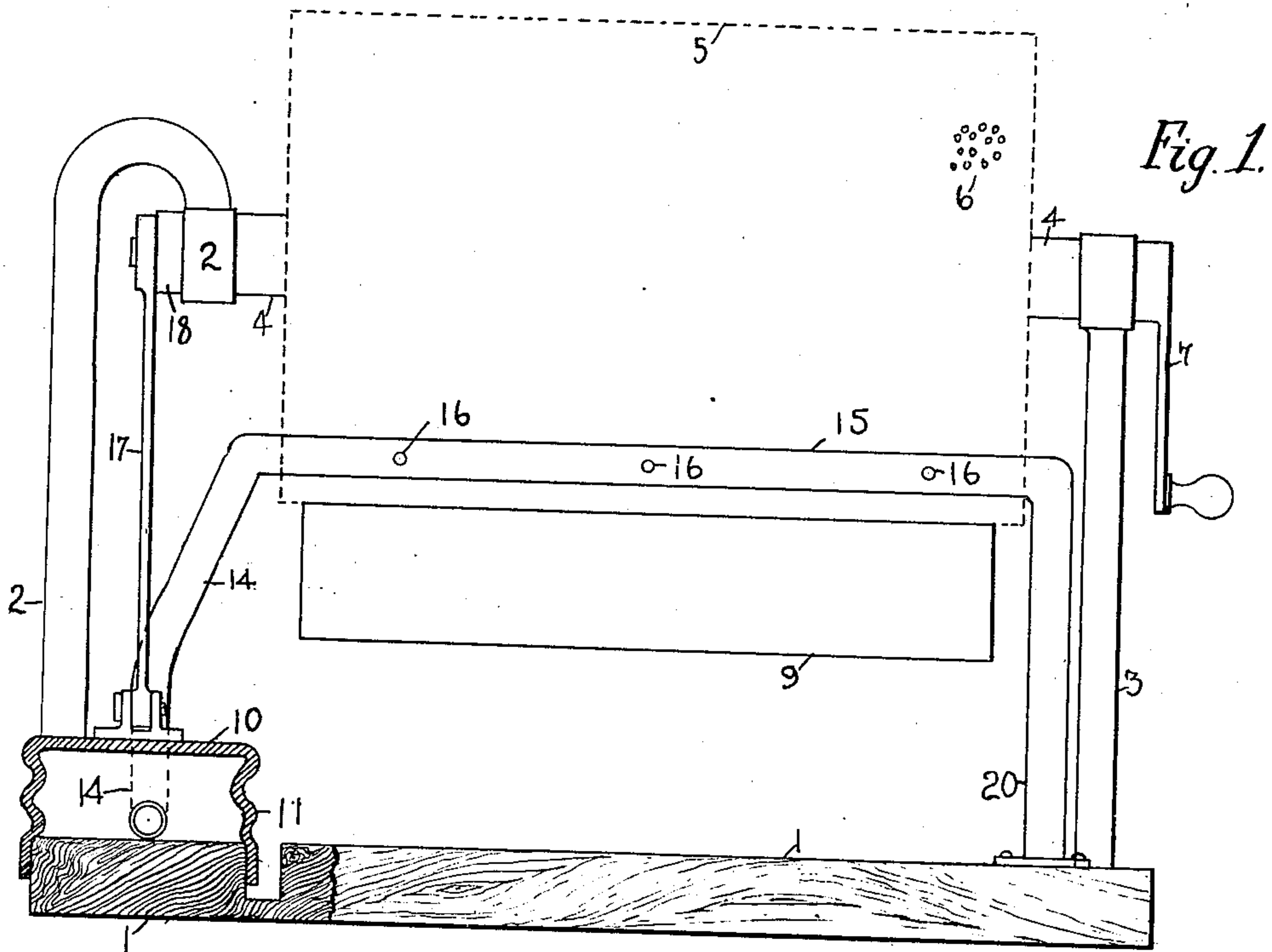


No. 886,992.

PATENTED MAY 5, 1908.

E. F. KUNATH.
STENCILING MACHINE.
APPLICATION FILED JAN. 10, 1906.



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STENCILING-MACHINE.

No. 886,992.

Specification of Letters Patent.

Patented May 5, 1908.

Application filed January 10, 1906. Serial No. 295,448.

To all whom it may concern:

Be it known that I, EDWARD F. KUNATH, a citizen of the United States, residing in Jersey City, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Stenciling-Machines, of which the following is a specification.

This invention relates to stenciling machines, in which usually the stencil or perforated wax sheet is laid upon a hollow stencil or drum, which consists of perforated sheet metal, the ink being applied to the interior of the drum, and passing through the perforations to the stencil sheet. A blanket for absorbing the ink is usually laid upon the cylinder beneath the stencil sheet. Blank sheets to be stenciled are passed between said cylinder and a pressure roll. It often happens, especially where the blank sheets are thin, that they adhere to the stencil sheet, and hence it becomes necessary to provide means for stripping the stenciled paper from the cylinder.

The devices heretofore employed for stripping the stenciled sheets are objectionable, principally because they contact with the stencil, and make lines or impressions thereon through which the ink passes on to the stenciled sheets.

The object of my invention is to provide simple, certain and inexpensive means for stripping the sheets as they emerge from the bite of the pressure roll and cylinder and without liability of marring the stencil or smearing the ink.

In carrying out my invention, I connect to the stencil cylinder a bellows arrangement, a pipe passing from the bellows along the stencil cylinder and having jets to direct the air between the cylinder and the leading edge of the stenciled sheet, thus stripping the leading portion of the stenciled sheet from the cylinder; the weight of the sheet itself sufficing to strip the remainder of the sheet, as it passes through the machine.

In the accompanying drawings, Figure 1 is a rear view of so much of a stenciling machine, as is necessary for illustrating my improvements, the stencil cylinder being shown in dotted lines, and the bellows in section. Fig. 2 is an end view, the bellows being shown in section.

Upon a base 1 are erected standards 2, 3, in which is journaled the shaft 4 of a hollow

stencil cylinder 5. The cylinder usually is provided throughout with perforations 6 for the passage of the ink, and is usually covered with an ink blanket and stencil sheet, not shown. The cylinder is rotated by a handle or crank 7, and the blank sheets 8 are fed between the cylinder and a soft pressure roll 9, which presses up against the under side of the cylinder. By reason of such pressure, the sheets 8 are caused to adhere to the stencil sheet upon the cylinder. In order to overcome this objection, I provide a bellows comprising preferably a disk-like top 10, and flexible sides 11 united at the bottom to the base 1. Within the base is formed an inlet 12 covered by a flexible flap or valve 13 within the bellows. From the latter leads upwardly a pipe 14, which at its upper end is bent horizontally, and extends along the rear under side of the cylinder at 15, this portion having a series of jets 16 in position to direct the blast of air between the under surface of the cylinder and the leading edge 8^a of the sheet, this edge never adhering to the cylinder, because an uninked margin is usually left at the top of the sheet.

The machine is shown in normal position at Fig. 2, the top of the bellows 10 being connected by a pitman 17 to a short crank 18, provided upon the cylinder shaft, said crank being normally in about horizontal position, although it may be otherwise connected. When the parts are in the Fig. 2 position, the leading edge of the blank sheet is introduced between the pressure roll, and the cylinder is then turned, as indicated by the arrow during which time the crank 18 and pitman 17 descend, thus closing the bellows and forcing the air to escape to the jets 16 and to blow between the cylinder and the leading edge 8^a of the sheet. This is sufficient to strip off the leading portion of the sheet, and the same passes below the pipe 15, and is received by a table 19; the weight of the sheet being sufficient to strip off the remaining portions thereof from the cylinder. The pipe 15 may be bent down as at 20, and attached to the base to form a support.

Variations may be resorted to within the scope of my invention, and portions of my improvements may be used without others.

Having thus described my invention, I claim:

1. In a stenciling machine, the combination with a stencil cylinder, of a handle con-

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5 nected thereto, a detent for holding the cylinder in position to receive a sheet to be stenciled, a roller to press said sheet against the cylinder, a crank or eccentric connected
10 to the cylinder, a bellows or blower connected to said crank or eccentric so as to be caused to expel a blast of air during the early portion of the revolution of said cylinder, and means for directing such blast be-
15 tween the cylinder and the leading edge of the sheet at a point near said pressure roller.

2. In a stenciling machine, the combination with a stencil cylinder having a shaft, of a crank or eccentric upon said shaft, a pit-
15 man connected to said crank or eccentric, a bellows connected to said pitman, so as to be caused to eject a blast of air during the early portion of the rotation of said cylinder from normal position, a tube connected to
20 said bellows and extending along said cylinder and having a series of jets to direct the blast of air to the cylinder and the leading edge of the stenciled sheet, and a roller to press the sheets against the cylinder.

25 3. In a stenciling machine, the combination with a stencil cylinder having a horizontal shaft, of a pressure roller bearing up against the bottom of the cylinder, a detent or a stop

for determining the normal position of the cylinder, a bellows or blower connected to
30 said shaft so as to be caused to expel a blast of air during the early portion of the rotation of said cylinder from normal position, and a tube connected to said bellows and extending along the under side of said cylinder near
35 said roller and having jets to direct the air blast between the cylinder and the leading edge of the stenciled sheet.

4. In a stenciling machine, the combination with a stencil cylinder, and a pressure
40 roll, of a bellows operatively connected thereto, and a tube extending along the cylinder and having jets directed towards the same, for directing the blast from the bellows between the cylinder and the leading edge of
45 the stenciled sheet, so as to strip the latter from the cylinder; said bellows being so connected to the cylinder that the blast is produced once in each revolution as the stenciled sheet emerges from the bite of the cylinder and roll.
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