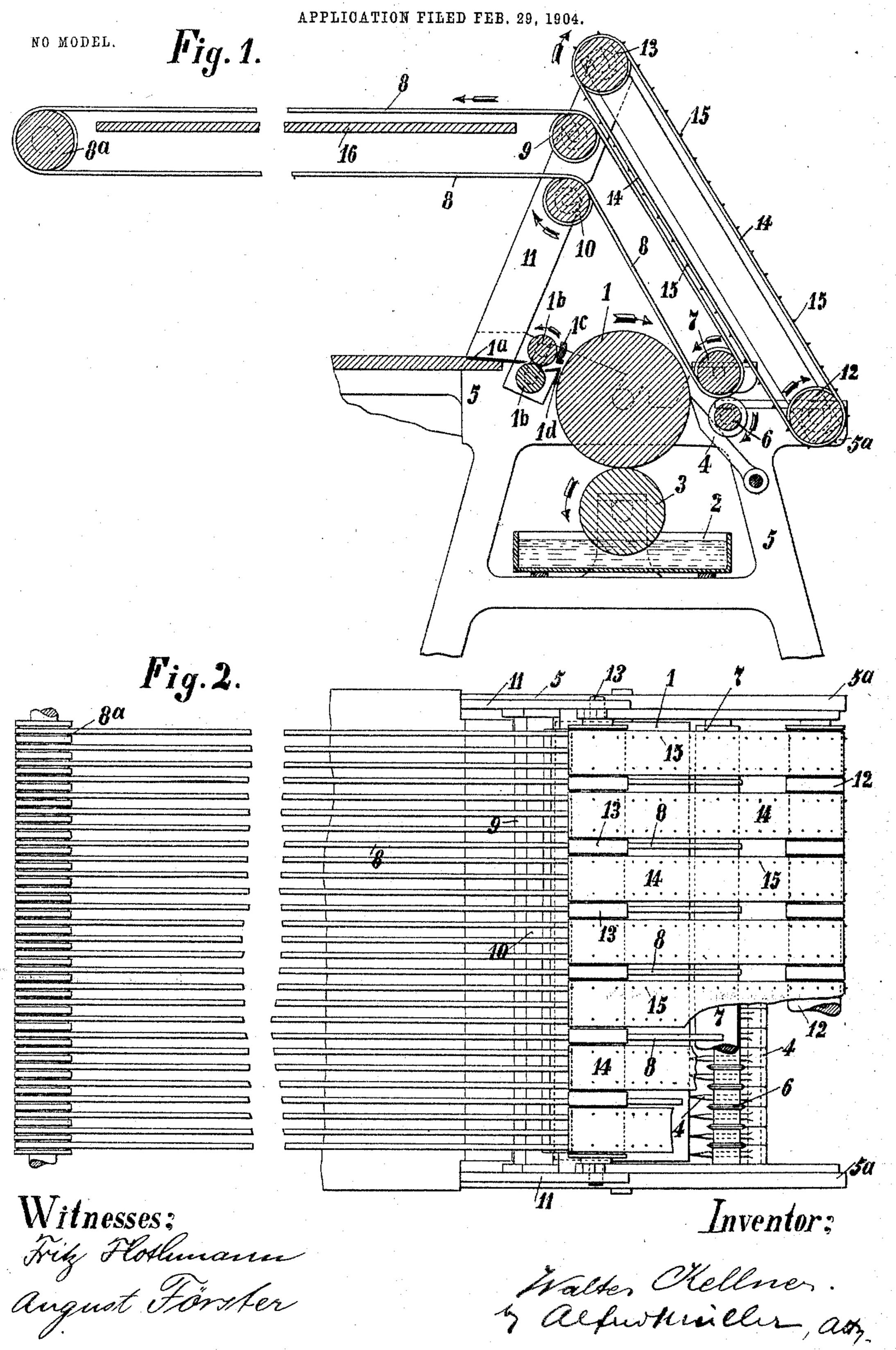
W. KELLNER.

MACHINE FOR PROVIDING SHEETS OF PAPER WITH GLUE OR OTHER SUITABLE PASTING MATERIAL.



UNITED STATES PATENT OFFICE.

WALTER KELLNER, OF DÜSSELDORF, GERMANY.

MACHINE FOR PROVIDING SHEETS OF PAPER WITH GLUE OR OTHER SUITABLE PASTING MATERIAL.

SPECIFICATION forming part of Letters Patent No. 777,258, dated December 13, 1904.

Application filed February 29, 1904. Serial No. 195,726. (No model.)

To all whom it may concern:

Be it known that I, Walter Kellner, a citizen of the German Empire, residing at Düsseldorf, in the Province of Rhenish Prussia, Kingdom of Prussia, Germany, have invented certain new and useful Improvements in Machines for Providing Sheets of Paper with Glue or other Suitable Pasting Material, of which the following is a gracification.

the following is a specification.

This invention relates to that sort of gluing or pasting machines for sheets of paper in which the sheets of paper are taken from a table onto a transporting-band which carries them to a suitable gluing or gumming device 15 and where they are provided on one side with such material and whence they are then brought over to a transporting-band and at the same time turned so that the gummed surface lies on the top side and the band then 20 carries the sheets one after the other to their place of destination. Now machines of this description in general are known; but while in the old constructions the gummed sheets are first carried along the whole length of the 25 carrier-band with the gummed side below and are then turned at the end of the band so as to bring that side to the top and are then carried back again to their respective places of destination in the present design this double way is avoided and the sheets are turned immediately as they leave the gummingroller with the gummed side upward and carried directly to their places of destination by the carrier-band.

On the accompanying drawings the improved machine is shown by Figure 1 in a longitudinal vertical section and by Fig. 2 in plan.

The roller 1 serves for gluing or gumming
the sheets of paper. It therefore works in contact with a roller 3, which is partly immerged in a receptacle 2, containing the glue or gum in solution. The sheets of paper are guided onto the gluing-roller 1 by the feeding device, consisting of the tray 1°, the rollers 1°, and the guides 1° and 1°. The circumferential speed of the rollers 1° is a little smaller than that of the roller 1, so that this latter glides

along the sheet of paper a little, and therefore a perfect gluing is obtained. Scrapers 4 serve 50 to take off the glued sheets from the roller 1. On the top of the main frame 5, immediately behind the point of contact of the scrapers 4 with the roller 1, are arranged the grooved rollers 6 and 7, and round the latter pass end- 55 less bands or strings 8, which are carried obliquely upward over the guide-rollers 9 and 10, which are journaled in an upright bracket 11, fixed to the main frame 5. From these guide-rollers 9 10 the bands 8 are carried hori- 60 zontally along through the room to their places of destination, the bands 8 being led at the end over a reversing-roller 8a, round which they complete their circuit. In front of the roller 6 is also journaled in a bracket 65 5°, projecting from the main frame 5, a roller 12, and above the roller 9 is carried in the bracket 11 a guide-roller 13. The rollers 12 and 13 are so arranged that an endless band or bands 14, placed round them, run exactly 70 parallel to the bands 8 on their way from roller 7 to roller 9 and nearly touch these bands 8, and the movement of the bands 8 and 14 is such that the lower part of 14 and the upper part 7 to 9 of 8 move in the same di- 75 rection. The bands 14 are provided with little pins 15. From this construction it will be seen that the sheets of paper coming from the roller 1 are guided by the scraper 4 over between the rollers 67, where they are taken 80 up by the endless bands 8 with the gummed side upward, the bands 14, with the pins 15, keeping the sheets down upon the inclined bands 8 and preventing them from rolling up until they reach the horizontal part from 9 to 85 8^a of the bands, on which they are carried to their place of destination. A table 16 may be placed between the bands 8 on their horizontal track to prevent their being deflected. From the description given and the illus- 90

tration shown it will be seen that this machine

can be arranged much shorter than the former

system, and it therefore occupies less room,

the guide-bands 14 are also shorter, and the

I am aware that machines of a similar char-

new machine can be supplied at a lower price. 95

acter have been known before my invention, and I therefore do not claim, broadly, such a machine; but

What I do claim, and desire to secure by Let-

5 ters Patent, is—

1. In a machine for providing sheets of paper with glue, gum or other suitable pasting material in continuous succession a tray 1°, feed-rollers 1°, guides 1°, 1°, a gluing-roller 1 receiving the paper from the feeding device 1° 1° 1° 1°, a dipping-roller 3 and a receptacle 2 containing the fluid pasting material, a frame 5 carrying said rollers and feeding device, in combination with scrapers 4, grooved rollers 6, guide-rollers 7, 9, 10, brackets 11 on frame 5 carrying the rollers 9 and 10, endless bands 8 laid round said rollers 7, 9 and 10 and a reversing-roller 8° for said bands 8 the whole as described and illustrated and for the purpose set forth.

2. In a machine for providing sheets of paper with glue, gum or other suitable pasting

material in continuous succession a tray 1^a, feed-rollers 1^b, guides 1^c, 1^d, a gluing-roller 1, a dipping-roller 3, a receptacle 2, a frame 25 5 carrying said rollers and guides, scrapers 4, grooved rollers 6, guide-rollers 7, 9, 10, brackets 11 carrying said rollers 9, 10, a reversing-roller 8^a, endless bands 8 passing round said rollers 7, 9, 10 and 8^a, in combination with 30 rollers 12 on brackets 5^a, rollers 13 carried on said bracket 11, endless bands 14 being provided with pins 15 and laid round said rollers 12, 13 so as to nearly touch the bands 8 on their way between the rollers 7 and 10, 35 the whole as described and illustrated and for the purpose set forth.

In testimony whereof I have affixed my sig-

nature in presence of two witnesses.

WALTER KELLNER.

Witnesses:

PETER LIEBER,
WILLIAM ESSENWEIN.