

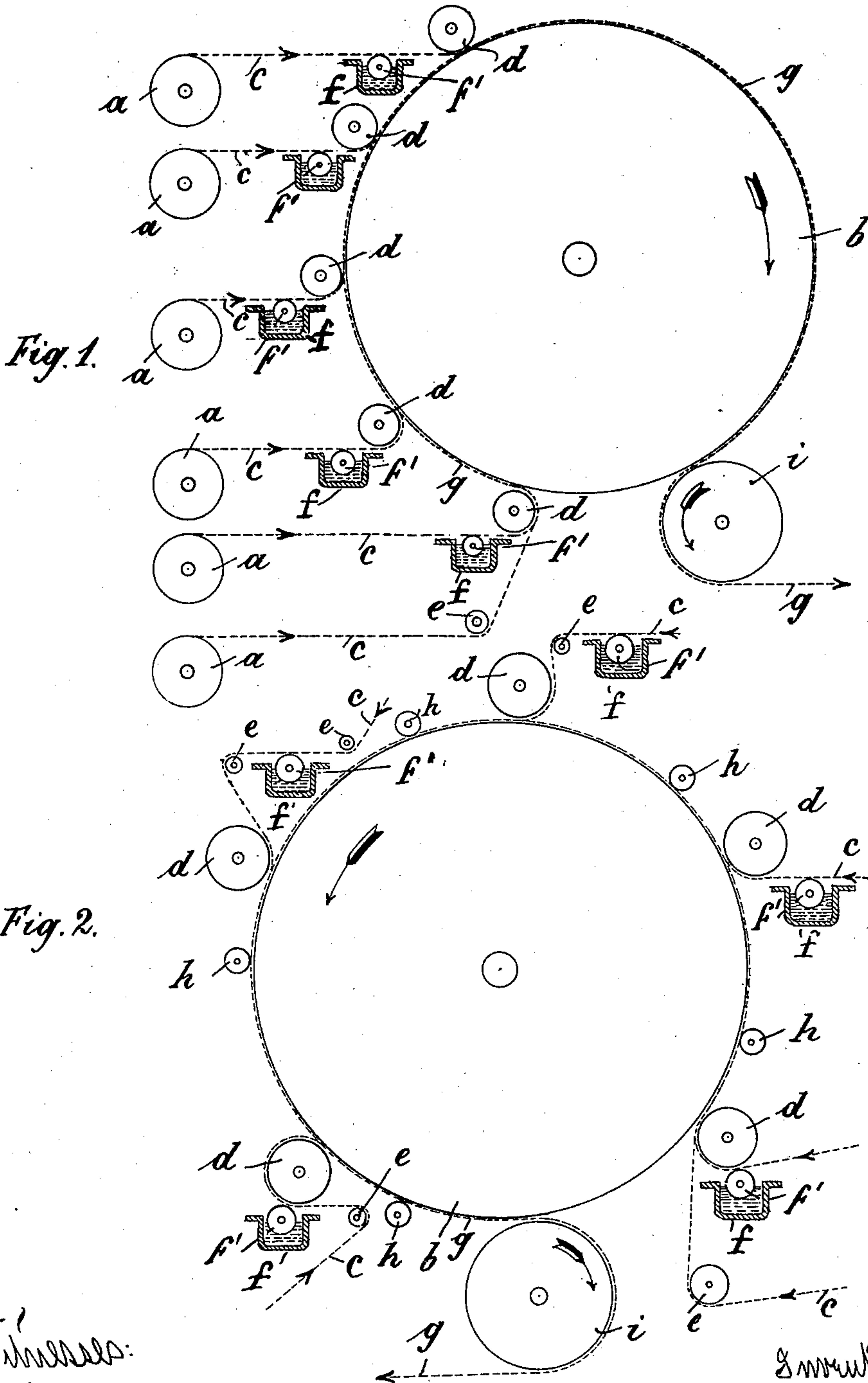
No. 666,207.

Patented Jan. 15, 1901.

E. OESER.
PAPER BOARD MACHINE.

(Application filed May 18, 1900.)

(No Model.)



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UNITED STATES PATENT OFFICE.

ERNST OESER, OF BERLIN, GERMANY.

PAPER-BOARD MACHINE.

SPECIFICATION forming part of Letters Patent No. 666,207, dated January 15, 1901.

Application filed May 18, 1900. Serial No. 17,128. (No model.)

To all whom it may concern:

Be it known that I, ERNST OESER, manufacturer, a subject of the Emperor of Germany, and a resident of Dresdenstrasse 79, Berlin, in the Kingdom of Prussia and Empire of Germany, have invented certain new and useful Improvements in Apparatus for Manufacturing Paper-Board, of which the following is a specification.

My invention relates to an improved apparatus for the manufacture of paper-board in which a drying-cylinder of large diameter is employed and a series of paste-receptacles and a series of guide-rollers located concentric with and adjacent thereto, so that the continuous series of webs or strips of paper are superposed successively on the drying-cylinder as soon as they are pasted, the result being that the series of webs or strips are passed to the drying-cylinder before the series of webs or strips has time to absorb the paste and are thus rendered liable to stretch or before the paste has time to dry.

In order that my invention may be fully understood, I will proceed to describe it with reference to the accompanying drawings, in which—

Figure 1 is an end elevation of my improved apparatus for manufacturing six-ply paper-board. Fig. 2 is an end elevation showing modification thereof.

b is a drying-cylinder of large diameter turning in the direction of the arrow, to which the continuous series of webs or strips of paper *c* are fed from a series of paper-rolls *a* around a series of guide-rollers *d*, contiguous to the drying-cylinder.

In close proximity to and concentric with the drying-cylinder *b* are located a series of paste-receptacles *f*, in which freely rotate the series of pasting-rollers *f'*, so that the series of paper webs or strips *c* when provided with paste by coming in contact with the series of pasting-rollers do not have time to stretch, since they come into contact or union with the next inner web or strip *c* immediately. The inner pasted web or strip, however, remains subject to the effect of the drying-cylinder, and the paste which is applied to the series of webs or strips has ample time between each two guide-rollers *d* to dry before the next web or strip is laid thereagainst.

e designates small guide-rollers, of which there is a series.

The built-up paper-board *g* is led off from the drying-cylinder around an auxiliary drying-cylinder *i*. In order to utilize the entire periphery of the large drying-cylinder, the series of paper webs or strips are introduced after the manner shown in Fig. 2. The series of rollers *d* according to Fig. 2 are arranged in such a manner that they will only direct the already-pasted series of webs or strips without pressing the latter, while the pressing is accomplished by special series of intermediate pressure-rollers *h*, arranged uniformly in rear of the series of guide-rollers *d*.

Having thus described my invention, the following is what I claim as new therein and desire to secure by Letters Patent:

1. An apparatus for manufacturing paper-board comprising a drying-cylinder of large diameter, a series of paper-rolls from which a series of paper webs or strips extend to the drying-cylinder, a series of paste-receptacles concentric with and adjacent to the drying-cylinder, and having a series of pasting-rollers free to rotate therein, the series of guide-rollers concentric with and adjacent to the drying-cylinder, and the auxiliary drying-cylinder to which the built-up paper-board is led.

2. An apparatus for manufacturing paper-board comprising a drying-cylinder of large diameter, a series of paper-rolls from which a series of paper webs or strips extend to the drying-cylinder, a series of paste-receptacles concentric with and adjacent to the drying-cylinder, and having a series of pasting-rollers free to rotate therein, the series of guide-rollers concentric with and adjacent to the drying-cylinder, the series of pressure-rollers concentric with and bearing against the drying-cylinder, and the auxiliary drying-cylinder to which the built-up paper-board is led.

In witness whereof I have hereunto set my hand in presence of two witnesses.

ERNST OESER.

Witnesses:

WOLDEMAR HAUPT,
HENRY HASPER.