

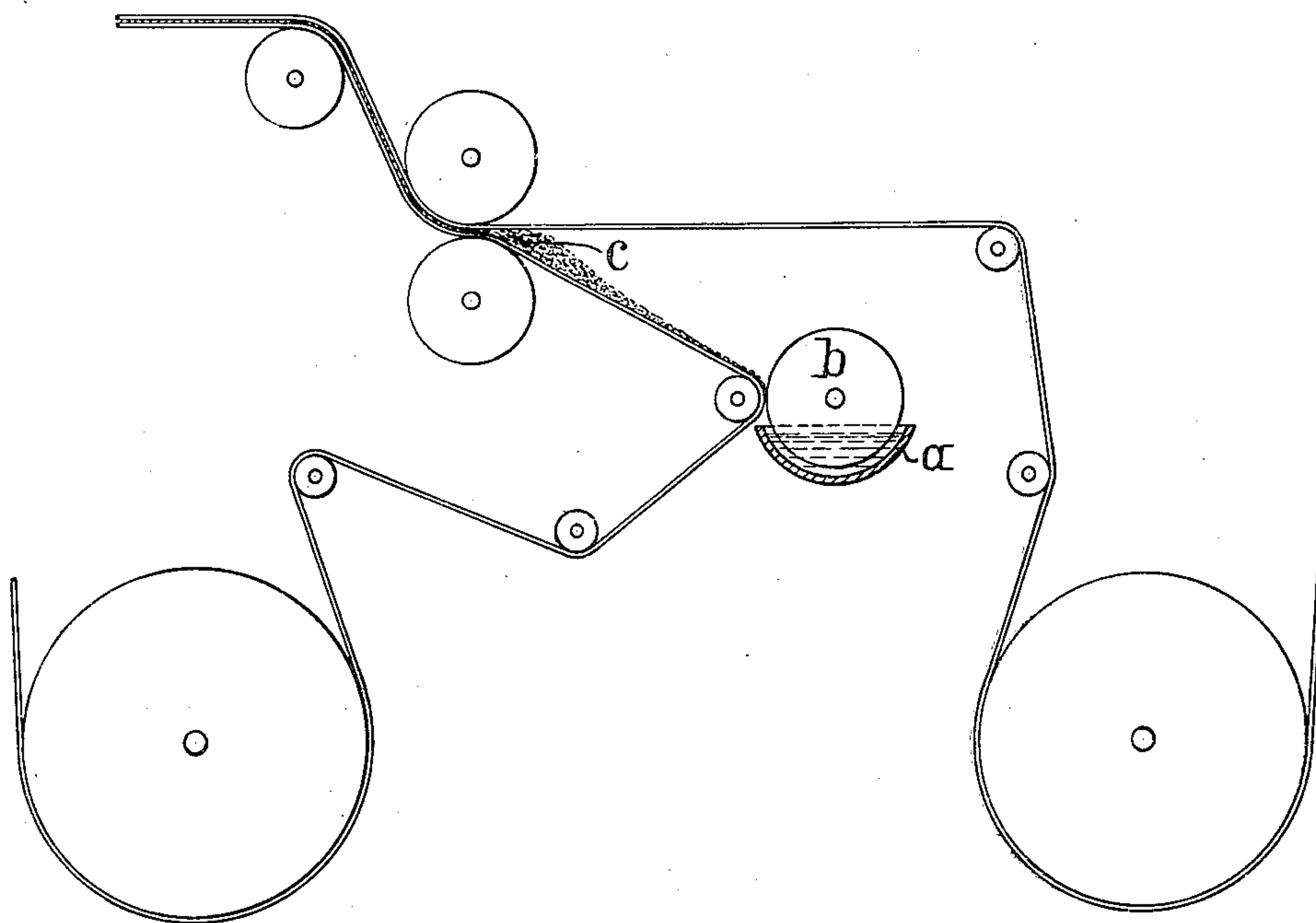
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R. KRON.

PROCESS FOR THE MANUFACTURE OF CARD PAPER OR THE LIKE FROM
TWO SIMULTANEOUSLY PRODUCED SINGLE PAPER WEBS.

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Witnesses:-

Otto W. Holmgren.

J. George Barry.

Inventor:-

Rudolf Kron

by attorney

Brown & Seward

UNITED STATES PATENT OFFICE.

RUDOLF KRON, OF GOLZERN, NEAR GRIMMA, GERMANY.

PROCESS FOR THE MANUFACTURE OF CARD-PAPER OR THE LIKE FROM TWO SIMULTANEOUSLY-PRODUCED SINGLE PAPER WEBS.

No. 897,543.

Specification of Letters Patent.

Patented Sept. 1, 1908.

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To all whom it may concern:

Be it known that I, RUDOLF KRON, managing director, a citizen of the Republic of Switzerland, and resident of Golzern, near Grimma, Kingdom of Saxony, German Empire, have invented a new and useful Process for the Manufacture of Card-Paper or the Like from Two Simultaneously-Produced Single Paper Webs, of which the following is a specification.

The present invention relates to a process for the manufacture of card paper or the like from two simultaneously produced single paper webs according to which the paper webs are separately submitted to a preliminary drying by means of drying rollers or cylinders, hereafter combined with each other with the aid of an adhesive and then finally dried.

The improvement is especially seen in the fact that the single paper webs are before providing them with the adhesive preliminarily dried until they only contain about 30 to 20% of water and one web, f. i. the one approaching the point, where the webs are united, from below, is provided with adhesive in a fluid condition in such a manner that in consequence of the reduced humidity of the paper web the fluid adhesive enters into or is taken up by the fibers of the paper web, but only the quantity which the paper web is able according to its degree of humidity to take up and requires for thoroughly sticking to the other paper web also preliminarily dried.

If the amount of water contained in the paper webs is not reduced between 30 and 20% and f. i. 35% of the same remains in the webs, the paper web would not be in a condition to receive or take up enough of the fluid adhesive and thus a solid and effective sticking together of the card paper would not be obtained. It is therefore essential for the process according to the present invention that the paper web is preliminarily dried to a degree of humidity as will allow the paper web to receive or take up the right amount of adhesive necessary to effect a good sticking or pasting together of the paper webs. At the same time the amount of adhesive taken up by the paper web is of greatest importance for the finally pasted card paper because if the correct amount of adhesive is used this pasted card paper will show a great transparency and distinguish itself by a good

sound as well as by a safe adhesion between its single layers or webs. Now the transparency of the paper depends on a correct distribution of the adhesive on the whole surface of the paper web and a really good transparency is only insured, if the adhesive is imparted in a liquid condition to the paper web preliminarily dried to the right extent, and its capacity to receive or take up the adhesive is automatically regulated through the degree of preliminarily drying the paper web.

The imparting of the adhesive to two paper webs preliminarily dried to an amount of humidity varying between 30 to 20% may f. i. be effected in the manner indicated on the accompanying drawing, according to which a roller *b* rotating in a receptacle *a* containing the adhesive acts against the preliminarily dried paper web, f. i. the web approaching the point of unison from below, the circumferential speed of said roller being larger than the speed of the progressing paper webs. In consequence of this difference between the two speeds the adhesive, so far as it has not already been taken up by the lower paper web accumulates just in front of the point, where the two paper webs are running together at *c* in such a manner that both paper webs take up and along with them an amount of adhesive exactly according to the amount of water which they contain.

What I claim is:

A process for the manufacture of card paper or the like, consisting in separately and preliminarily drying two simultaneously produced paper webs to a predetermined degree of humidity, for instance, to a degree of humidity of from 30 to 20 per cent, directing these paper webs from separate sources of supply into engagement with each other and applying to one of the webs an amount of paste greater than is capable of being absorbed by it, thereby producing in proximity to the point of engagement of the two webs a surplus supply of paste to be absorbed by the web to which the paste was not first applied.

In testimony, that I claim the foregoing as my invention, I have signed my name in presence of two witnesses, this 9th day of November 1907.

RUDOLF KRON.

Witnesses:

RUDOLPH FRICKE,
SOUTHARD P. WARNER.