S. HAMMERSCHLAG.

WAXING PAPER.

No. 193,867. Patented Aug. 7, 1877.

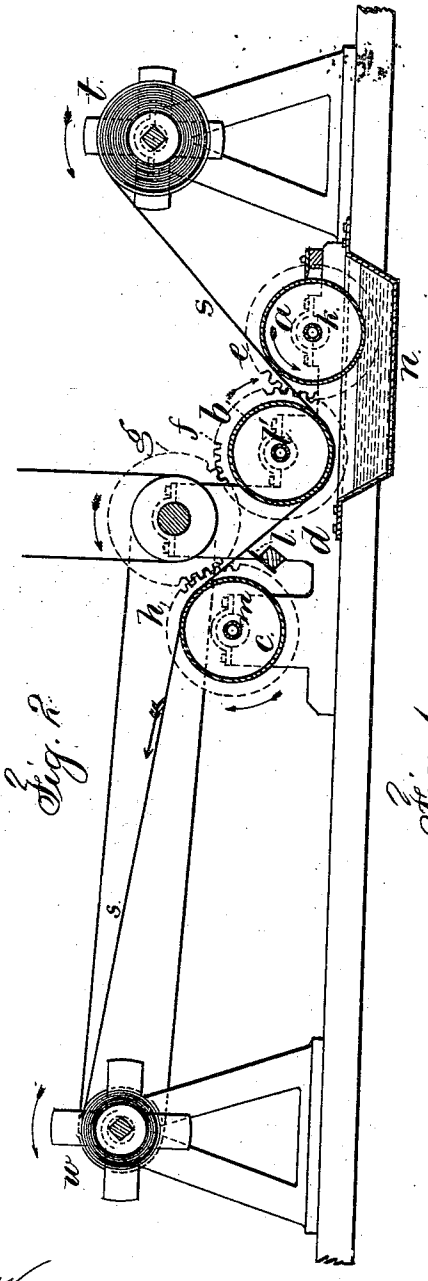


Fig. 2.

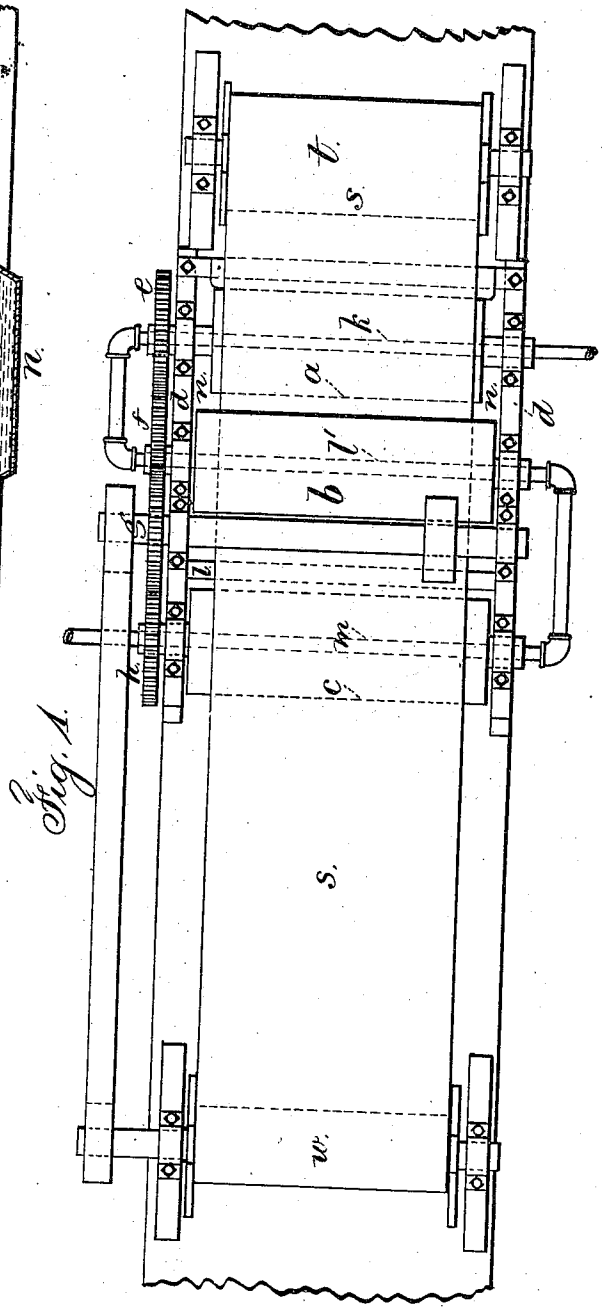


Fig. 1.

Witnesses

Chas. H. Smith
Harold Serrell

Inventor

Siegfried Hammerschlag
per Lemuel W. Serrell
atty

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

SIEGFRIED HAMMERSCHLAG, OF JERSEY CITY, NEW JERSEY.

IMPROVEMENT IN WAXING PAPER.

Specification forming part of Letters Patent No. **193,867**, dated August 7, 1877; application filed June 4, 1877.

To all whom it may concern:

Be it known that I, SIEGFRIED HAMMERSCHLAG, of Jersey City, in the State of New Jersey, have invented an Improvement in Waxing Paper, of which the following is a specification:

The object of this invention is to apply paraffine or other wax to paper, to render the same water-proof. This paper is adapted to confectionery, to prevent the adhesion of articles one to another or to the paper, and the paper may also be used in wrapping butter, cheese, cutlery, and other articles requiring a water-proof protection.

My improvement relates to a means for heating the wax, applying it to the paper, spreading or diffusing the wax into the paper, removing surplus wax, and then polishing the surface prior to winding the paper upon a reel.

In the drawing, Figure 1 is a plan view, and Fig. 2 is a longitudinal section, of the apparatus employed by me.

The cylinders *a b c* are hollow, and their journals are mounted in a suitable framework, *d*, and the gear-wheels *e f g h* are employed to give motion to the rollers in the direction indicated by the arrows.

Each cylinder is supplied with steam to heat the same to the desired temperature, as in a calendering-machine. The steam-pipes are shown at *k l' m*.

There is a trough, *n*, beneath the cylinder *a*, into which paraffine or other wax is introduced, and the proximity of the rollers *a b* to this trough insures the melting of such wax, and the surface of cylinder *a* takes up a layer of wax and applies it to the web of paper *s* that is drawn off the reel *t* and wound upon the reel *w*.

The paper next passes beneath the heated cylinder *b* with the plain surface of the paper next to the heated cylinder. This serves to heat the paper, and melt and diffuse the wax throughout the fabric of the paper, so as to render it thoroughly water-proof.

The paper now is drawn over the stationary scraper *l*, to remove any surplus paraffine, and then it is brought over the heated cylinder *c* with the waxed surface in contact therewith. By this cylinder *c* the paraffine is again fused and spread into and upon the surface of the paper, and the surface of the heated cylinder *c* travels in the opposite direction to the paper with which it comes into contact, thereby ironing and smoothing the wax, and giving to the same a polished and uniform appearance.

The paper prepared in this manner is saturated and rendered transparent, or nearly so, by the action of the wax, and it is a new article of manufacture, adapted to various uses in the arts, as aforesaid.

I claim as my invention—

1. The heated cylinders *a b c*, in combination with the trough *n*, the scraper *l*, and mechanism for revolving the cylinder *c* in the opposite direction to the movement of the paper with which it is in contact, substantially as set forth.

2. The method herein set forth of waxing paper, consisting in spreading the wax upon the surface, heating the paper from the opposite side, to spread and fuse the wax into the fabric of the paper, removing the surplus wax, and remelting and polishing the wax upon the paper, substantially as set forth.

Signed by me this 28th day of May, A. D. 1877.

SIEGFRIED HAMMERSCHLAG.

Witnesses:
GEO. T. PINCKNEY,
HAROLD SERRELL.