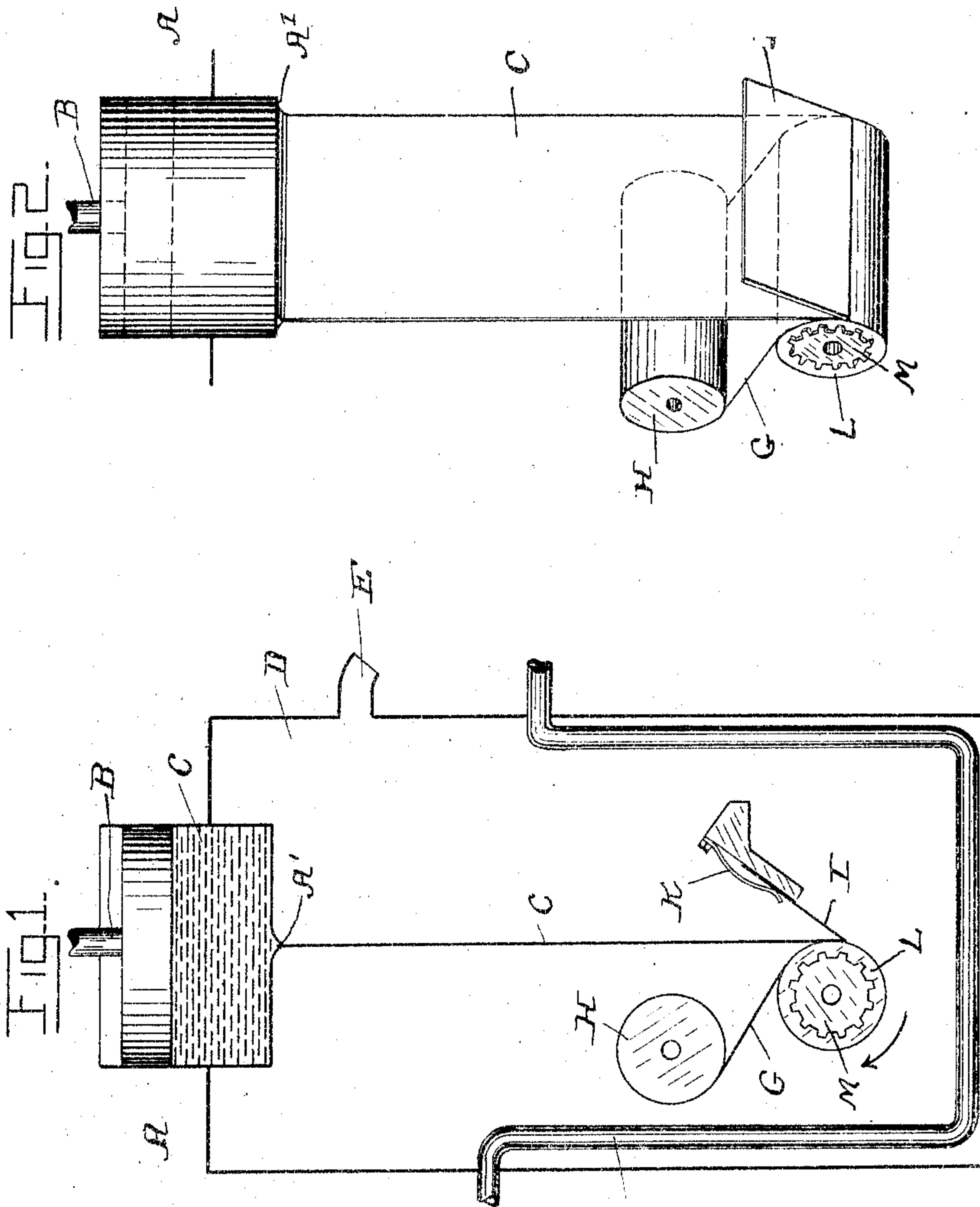


No. 883,722.

PATENTED APR. 7, 1908.

I. KITSEE.  
MANUFACTURE OF GLUE.  
APPLICATION FILED JUNE 4, 1904.

2 SHEETS—SHEET 1.



WITNESSES:

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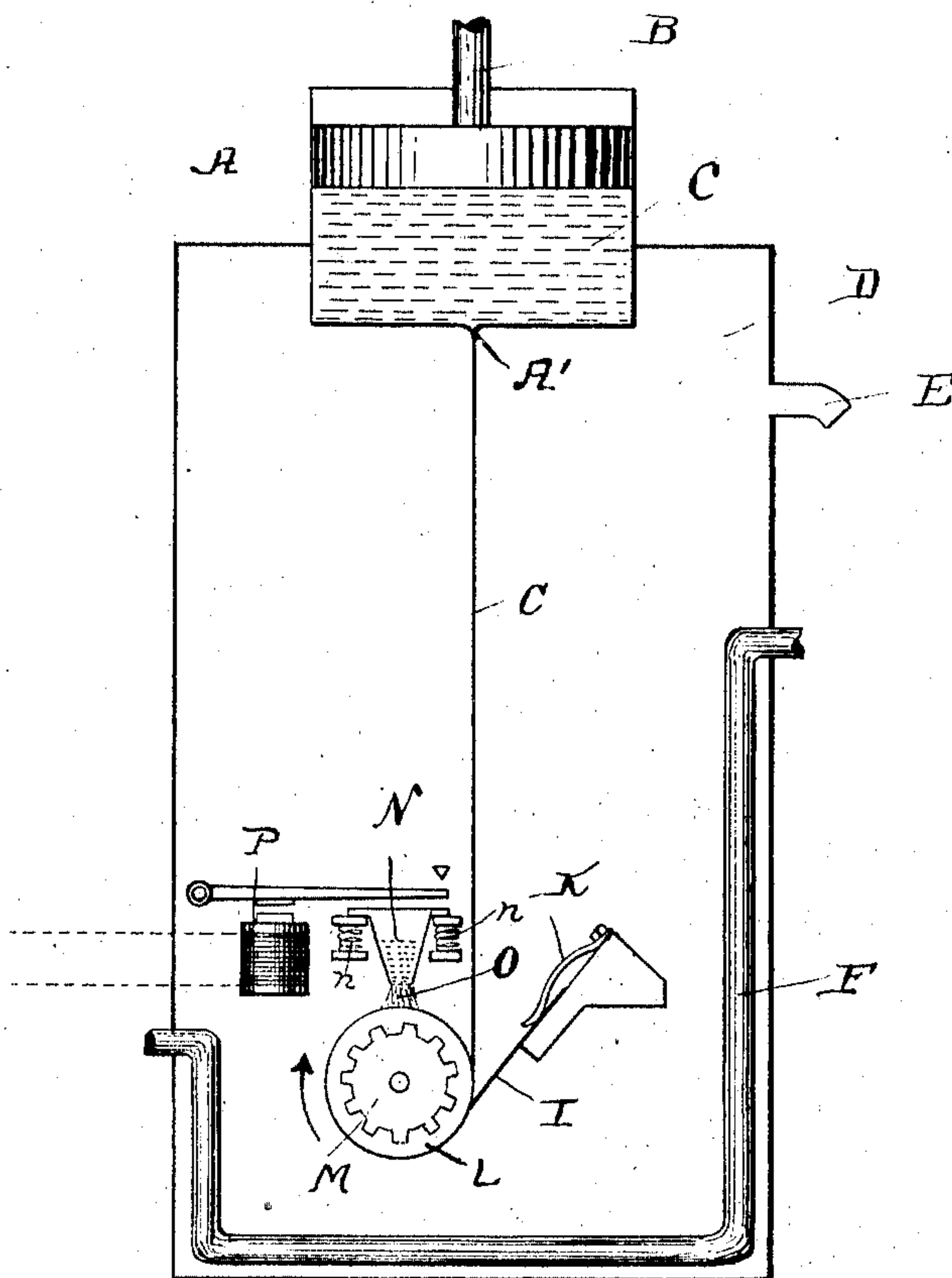
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2 SHEETS—SHEET 2.

Fig-3



WITNESSES:

Edith R. Kelley  
H. C. Yeller

INVENTOR.

I. Kitsee



# UNITED STATES PATENT OFFICE.

ISIDOR KITSEE, OF PHILADELPHIA, PENNSYLVANIA.

## MANUFACTURE OF GLUE.

No. 883,722.

Specification of Letters Patent.

Patented April 7, 1908.

Application filed June 4, 1904. Serial No. 211,171.

*To all whom it may concern:*

Be it known that I, ISIDOR KITSEE, of the city and county of Philadelphia, State of Pennsylvania, have invented certain new and useful Improvements in the Manufacture of Glue, of which the following is a specification.

My invention relates to an improvement in the manufacture of glue or gelatin and has more special reference to the production of the dry article out of the liquid gelatinous mass.

As practiced to-day the moist glue or gelatin is spread over nettings and left in a drying room to allow the moisture to evaporate.

It is well known that in commerce it is preferable to produce this glue in thin sheets of a smooth surface, and to accomplish such purpose is the aim of my invention.

Referring now to the drawing:—Figure 1 is a sectional view embodying my invention. Fig. 2 is a partial elevation and partial perspective view of the device employed by me in the production of the thin sheets of glue. Fig. 3 is a similar view to Fig. 1 illustrating a modification of my invention.

A is a receptacle provided with the orifice A<sup>1</sup>. This orifice may be of any required width and should be narrow so that only a very thin sheet or stream of liquid glue can issue therefrom.

C is the liquid glue contained in the receptacle and B are means whereby either with the aid of compressed air or other suitable means a pressure is exerted on the material C, so as to force the same out through the orifice A<sup>1</sup>.

D is a chamber provided with the means F to produce in said chamber the necessary high temperature and provided also with the means E which may be connected to any of the known devices so as to produce a vacuum in said chamber.

H is a reel around which is wound the paper G.

K are means to hold the comparative short piece of paper I. L is a drum or reel around which these two papers in conjunction with the sheet of glue or gelatin is wound. This drum is provided with the means M which may be coupled with any of the well known actuating means, such for instance as a motor, electrical or otherwise, so as to slowly revolve said drum.

In Fig. 3, N is a spraying device adapted to spray the material O on the glue as the same is being reeled on drum L, and pro-

vided with actuating means here shown as electro-magnet P and springs n.

The *modus operandi* of practicing this my invention is as follows:—Glue or gelatin while still in its liquid state but of a syrupy consistency is placed in the receptacle A and forced, preferably with the aid of air-pressure, through the orifice A<sup>1</sup>. This orifice is preferably of a dimension sufficient only to allow a sheet or stream of the liquid mass of the thickness of a common sheet of paper to issue through same. The receptacle A is hermetically sealed into the chamber D; this chamber should be, by preference, air-tight and it is advised that with the aid of the means E the air should be exhausted from this chamber. It is also proposed that this chamber should be of considerable height, so that it should take an appreciable time before the sheet of glue or gelatin, issuing from the orifice A<sup>1</sup>, should reach the point where it strikes the periphery of the reel L, for it is proposed that as the temperature of this chamber is raised to the required degree and as the air is exhausted from this chamber that the moisture in this thin sheet of glue should, during the progress of its travel from the orifice A<sup>1</sup> to the reel or drum L, be evaporated so that when this thin sheet of gelatin or glue is wound on the reel L, the same may be dried enough so as not to stick on the paper G. But to better provide against the sticking, I prefer to use what is commonly known in commerce as paraffin paper, that is, a very thin tissue paper provided with paraffin. To start the sheet of glue or gelatin on the reel L I provide the small piece of paper I held by the spring K; this for the purpose of guiding the thin sheet of glue when it reaches the reel L around the periphery of same; and for this purpose the ends of both the papers I and G are securely fastened to the reel L. The reel L revolves in the direction as indicated by the arrow at a predetermined speed which should be in accordance with the speed with which the sheet of gelatin or glue issues from the receptacle A through the orifice A<sup>1</sup>. When the receptacle A is emptied, that is, all the glue formerly contained therein has been reeled around the drum L, air is again allowed to enter the chamber D and the reel L with its contents is removed from the chamber and is, by preference, placed in a chamber where in with the aid of fans or a like means the same is subjected to a continuous draft of air



so as to drive out any moisture which still remains thereon.

In Fig. 3, I have illustrated the same method as in Figs. 1 and 2, with the exception that I have discarded the paper G entirely and have substituted therefor a spray of fine drying powder, which may consist of talcum, magnesia or any other suitable material. This for the purpose of keeping the different layers of glue from adhering to each other.

Having now described my invention, what I claim as new and desire to secure by Letters Patent is:—

1. The method of producing a continuous sheet of glue or gelatin, which consists in causing the glue in a liquid or semi-solid state to issue in a continuous thin stream from a receptacle, causing this stream to descend and during its descent the surplus moisture to be evaporated, and causing the so-formed thin sheet to be wound around a drum or reel, the surface of the different layers or convolutions being provided with

means to prevent the same from adhering to each other. 25

2. In the production of glue or gelatin, the method which consists therein that said glue or gelatin, when still in a moist or pliable state, is caused to be wound as a continuous sheet on a support, the different layers or convolutions provided with means to prevent the same from adhering to each other. 30

3. In the production of glue or gelatin, the method which consists therein, that said glue or gelatin, when still in a moist or pliable state, is caused to be wound as a continuous sheet on a drum or sleeve, the different layers or convolutions separated by a continuous sheet of paper. 40

In testimony whereof, I hereby sign my name in the presence of two subscribing witnesses, this twenty-third day of May, A. D. 1904.

ISIDOR KITSEE.

Witnesses:

H. C. YETTER,  
EDITH R. STILLEY.