

JULES WATTEAU.  
Process for Bleaching Wool.  
No. 121,564. Patented Dec. 5, 1871.

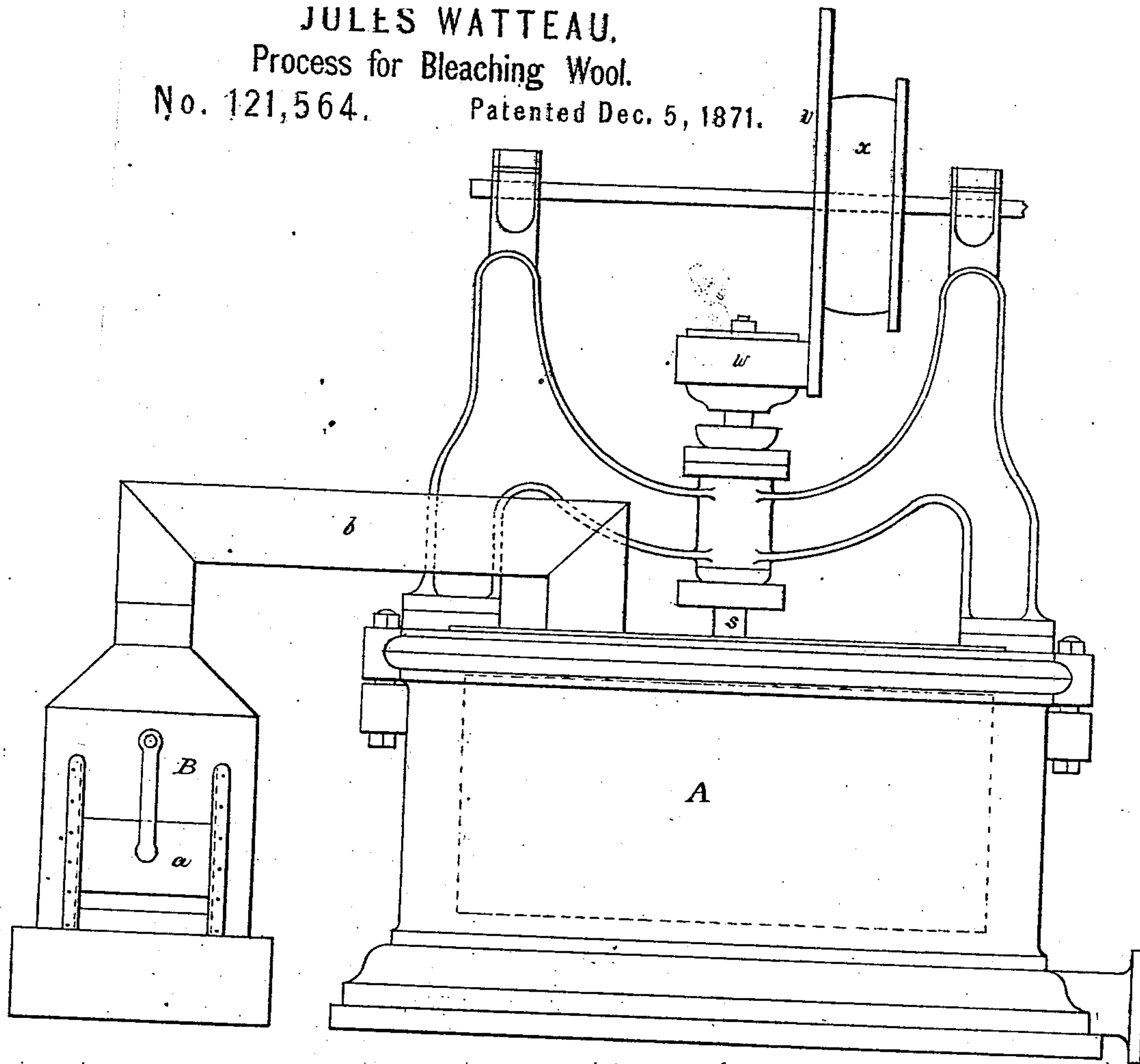


FIG. 1.

INVENTOR.

Jules Watteau  
By his Attorney  
Chas. F. Mansbury

WITNESSES.

E. R. Stansbury.  
W. R. Stansbury

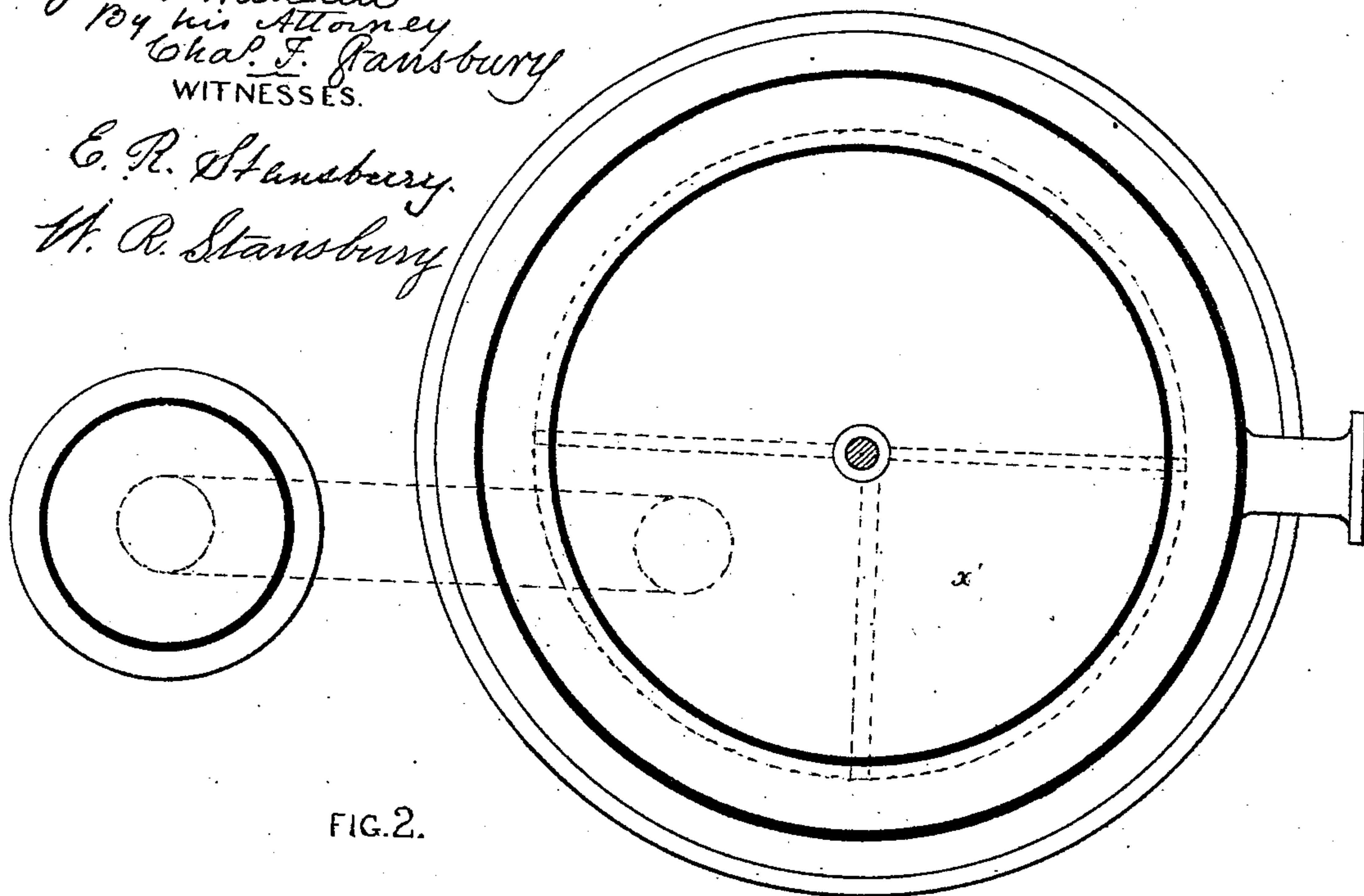


FIG. 2.

# UNITED STATES PATENT OFFICE

JULES WATTEAU, OF ANTWERP, BELGIUM.

## IMPROVEMENT IN BLEACHING WOOL.

Specification forming part of Letters Patent No. 121,564, dated December 5, 1871.

*To all whom it may concern:*

Be it known that I, JULES WATTEAU, of Antwerp, in Belgium, have invented a new and useful Process in Bleaching Wool, of which the following is a specification:

In the drawing, Figure 1 is a front elevation of the apparatus I employ to carry out my invention. Fig. 2 is a plan, with the devices for revolving the basket of the centrifugal machine omitted.

A is the outer casing of a centrifugal machine such as is ordinarily used for drying wool, the basket within being revolved as usual by the shaft, *s*, wheels *w* and *v*, and pulley *x*. B is a small sheet-iron stove having a slide, *a*, as shown. The stove has a funnel, *b*, by which it communicates with the basket of the centrifugal through the cover *x'* of the casing. This casing is of wood and may be hermetically closed, its cover being made in sections, as shown, one section sliding above another. Within the stove there is placed a sheet-iron vessel containing sulphur, the burning of which is regulated by the slide *a*.

I charge the basket of the centrifugal with wool, handling it as softly as possible in order that the wall of wool formed upon the interior of the basket by the action of the centrifugal machine may be even throughout. The sulphur is then lighted, and the centrifugal being set in motion the draught created thereby causes the sulphur to burn freely in the stove, and the sulphurous acid to pass over into the centrifugal, whence it is expelled by the rapid revolution of the basket, passing through the wool and the perforations of the basket in the same manner as liquids used in centrifugals for similar purposes, and finally escaping through the pipe *p*.

Another mechanical contrivance, though not so good as the one just described, draws the sulphurous acid through the wool by a draught created by a fan. It consists of a close chamber, such as is often used for drying wool, having for its outlet a pipe or chimney containing a revolving fan. The chamber has a horizontal gauze partition, upon which the wool is evenly laid and under which the gas is introduced.

In order that the wool may be properly bleached it is necessary that it should be previously well washed.

Other bleaching gas than sulphurous acid may be prepared in any ordinary manner and passed through the wool as above described; though I find sulphurous acid to be the best for this process.

My invention saves one handling of the wool, whether the centrifugal is used or the other device above described, for the wool may be bleached in the same machine in which it is dried.

Asphaltum varnish will protect the stove and other apparatus from the action of the sulphurous acid.

I claim—

The method herein described of bleaching wool by the application of a suitable bleaching-gas to it by means of atmospheric pressure obtained by an exhausting or condensing fan or centrifugal machine, substantially in the manner described.

J. WATTEAU.

Witnesses:

CH. VAN LIEBERGEN,  
I. MELDEN.

(11)