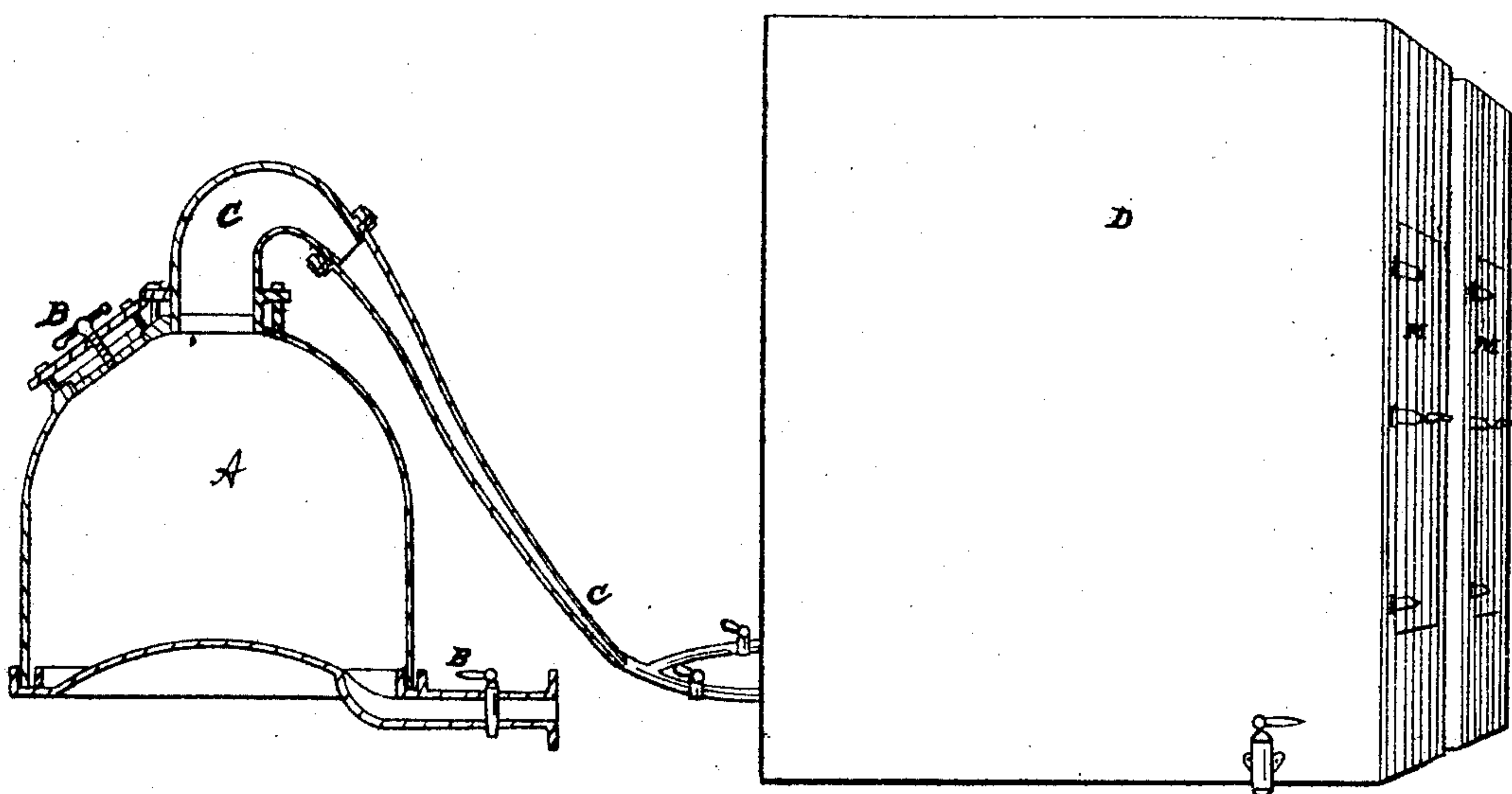


L. S. Robbins.

Cleaning Wool.

N^o 75980

Patented Mar. 24, 1868.



Witnesses.

*Nathaniel Gill.
M. Ahearn.*

Inventor.

Louis S. Robbins.

United States Patent Office.

LOUIS S. ROBBINS, OF NEW YORK, N. Y.

Letters Patent No. 75,980, dated March 24, 1868.

IMPROVED PROCESS OF CLEANING WOOL, &c.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, LOUIS S. ROBBINS, of the city, county, and State of New York, have invented a new and improved Process for Preparing Wool previous to its manufacture into fabrics; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to use the same, special reference being had to the accompanying drawings, forming part of this specification.

It is a well-known fact that wool, in its natural condition, contains or is pervaded by elements of an alkaline and oily nature in combination, which form a glutinous or gummy substance on the fibre of the wool, which must be removed before the same is suitable for manufacturing purposes, and, also, that the wool requires to be oiled after it has been cleansed, and before it is manufactured. To remove the alkaline, oily, and gummy substances from the wool, and to oil it in a suitable manner previous to its being manufactured, as well as to soften and improve the fibre of the same, is the object of the present invention, and this object is accomplished thereby.

The method consists, first, in saturating the wool with the light vapors obtained from a distillation of petroleum, naphtha, or other similar substances; and, secondly, in supplying oil to the wool in the form of vapor, after it has been properly cleansed, and before it has been converted into fabric.

Many materials and processes have been employed to cleanse wool, and to prepare it for the manufacturer, but the best of these have only been partially successful, owing to the nature of the materials employed and the defective methods of their application. One form of apparatus for using my improved process is represented in the accompanying plate.

A, in the drawing, represents a retort, made of any desirable form and size, in which petroleum, naphtha, or other oleaginous substances or compounds are placed, and subjected to the action of heat from any suitable furnace. B represents the man-hole, in the upper part of the retort, used in cleansing the still, and in changing its contents. This should not be closed until the lighter acidulated vapors have passed off. C C, a pipe, communicating with retort *a*, at or near the top, passing to and also communicating with chambers or receptacles D. E is a discharge-pipe, employed in drawing off the remaining contents after the operation is over. Heat being applied to retort *a*, which contains the petroleum, &c., as described, vapors are generated therein, the first or lightest of which are allowed to escape through the man-hole, after which, the man-hole being closed, the vapors pass through the connecting-pipe C C into the chamber or chambers D, containing the wool, dissolving the glutinous substances that pervade the same, so that the subsequent washing removes them completely, leaving the fibre in a more perfect condition for manufacturing purposes than can be produced by any other process. When the operation has been continued as long as necessary, the wool may be removed from the chambers D, through the doors *m m*, when the chambers may again be filled with wool, and so on as long as may be desired. After the cleansing process, the wool may be oiled for the manufacturer's use by the same general method or process already described, using in the retort such oleaginous compounds as are best adapted to the purpose.

From the foregoing description, it is apparent that the use of materials in the form of vapor, which operate as a solvent of the gummy substances on the wool, aided by a degree of heat which renders the fibre more pliable, and the substances used more subtle and penetrating, constitute a process superior in its effects to the use of any and all substances in a liquid state; and also that saturating the wool with oleaginous vapors is a more uniform, perfect, and economical method than any application of the same by mechanical means.

I do not intend to limit myself to any particular form of apparatus, as there are various ways in which the same results may be accomplished; but

What I do claim as new, and desire to secure by Letters Patent, is—

The process herein described for removing the alkaline, oily, and gummy substances from wool, by the use of the light vapors obtained from petroleum, naphtha, and other similar substances or compounds, substantially as described.

Also, I claim the process of saturating wool, preparatory to its being manufactured, by the application of oleaginous vapors, substantially as herein described.

Witnesses:

D. B. BIMAN,
MARSHALL ROBBINS,

LOUIS S. ROBBINS.