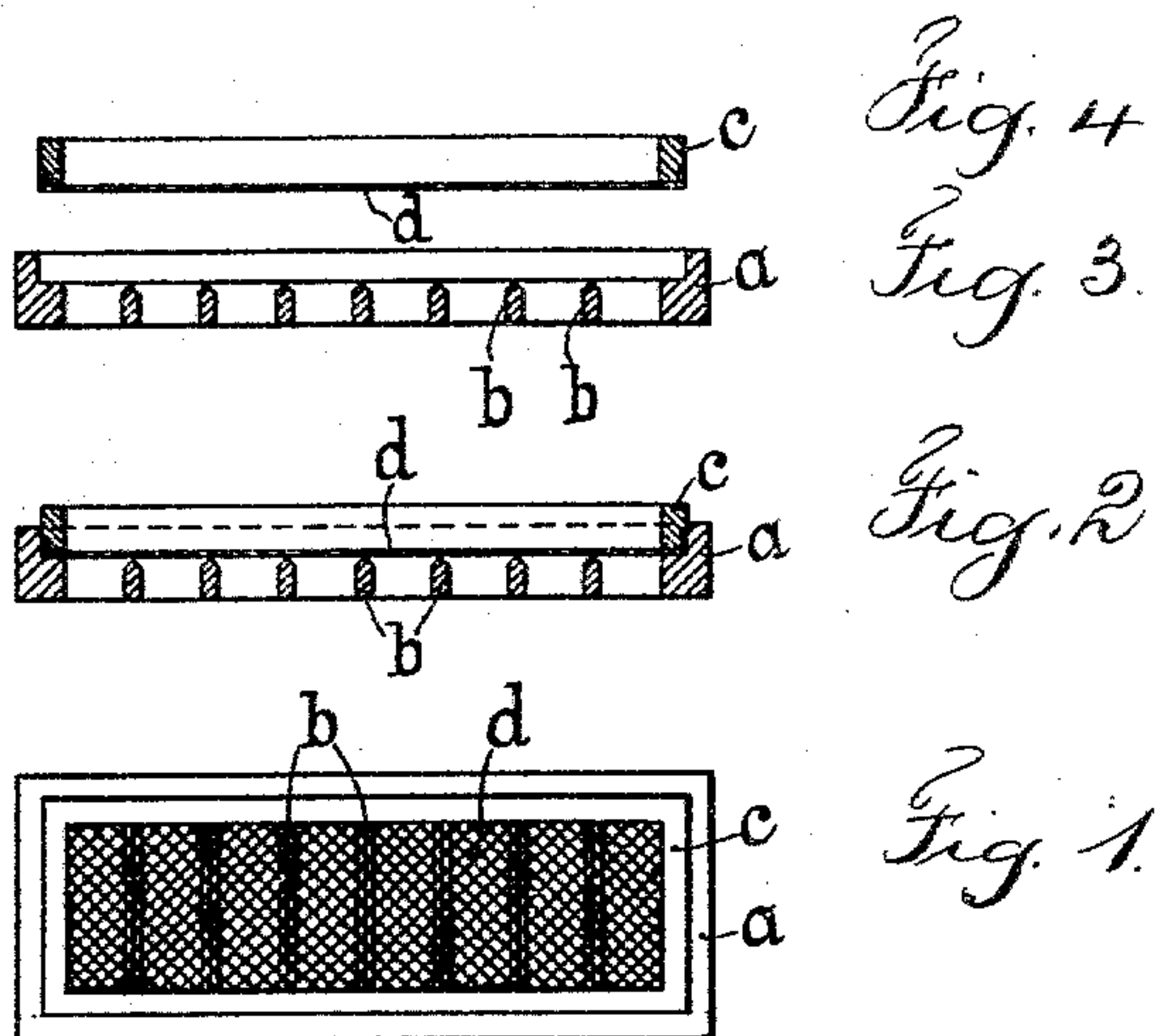


(No Model.)

R. SPUTH.
APPARATUS FOR MAKING WOOD FELT.

No. 571,580.

Patented Nov. 17, 1896.



Witnesses

Chas. H. Smith
Geo. T. Pinckney

Inventor

Robert Sputh
per Lemuel W. Perrell
Att.

UNITED STATES PATENT OFFICE.

ROBERT SPUTH, OF DRESDEN, GERMANY.

APPARATUS FOR MAKING WOOD FELT.

SPECIFICATION forming part of Letters Patent No. 571,580, dated November 17, 1896.

Application filed May 15, 1894. Serial No. 511,347. (No model.) Patented in Austria-Hungary July 4, 1892, No. 1,666 and No. 1,576, and in Germany October 25, 1892, No. 68,499.

To all whom it may concern:

Be it known that I, ROBERT SPUTH, a subject of the King of Saxony, residing at Dresden, Kingdom of Saxony, and Empire of Germany, have invented an Improvement in Apparatus for Making Wood Felt, of which the following is a specification.

Letters Patent for this invention have been secured in the German Empire, dated October 25, 1892, No. 68,499, and in Austria-Hungary, No. 1,666 and No. 1,576, dated July 4, 1892.

The object of this invention is to manufacture a wood felt of a thickness adapted to use as a non-conducting coating or covering for steam or other pipes, the same having the appearance of felt, but much lighter and more spongy in texture, so as to be a bad conductor of heat or cold, and this material is adapted as a wrapper or inclosure for surfaces that require to be protected against heat or cold, such as pipes or reservoirs for fluids, and it is also well adapted to serve as a cover for trays or as a rest or stand for draining glasses for absorbing drops of liquid running down the outside of such glasses or vessels before or after use.

I make use of a frame with a sieve attached to its bottom and a supporting-frame having cross-bars and rabbeted for the reception of the sieve-frame, so that the sieve and frame may rest upon the cross-bars while paper-pulp is run into the frame in a layer of the proper thickness determined by the height of the sieve-frame, and then the frame and pulp are removed from the supporting-frame and pressure applied to the layer of pulp for consolidating the same.

In the drawings, Figure 1 is a plan view of the frame and its support. Fig. 2 is a vertical section of the same. Fig. 3 shows the supporting-frame and cross-bars, and Fig. 4 the sieve and frame in section.

The frame *a* is made with an internal rabbet and cross-bars *b*, the top edges of which are beveled and upon the same level, or nearly so, as the surface of the rabbet, and the frame *c* is of a size to fit within the rabbet of the frame *a*, and it is provided with a sieve bottom *d*, so that the upper frame and the sieve can be lifted off the lower and supporting frame, and the sieve is supported by the cross-bars while the wood-pulp in a moist condition is filled into the frame *a* upon the sieve *d* in

a uniform layer and allowed to remain upon the frame *a* and supported by the bars *d* until the water has drained away to a considerable extent. The frame *c* and sieve *d* are then removed from the frame *a* and the wood felt is exposed to the action of a press, having first been covered by a layer of felt or other suitable material within the frame and sufficiently thick to rise above its edges, and a number of the sieves are placed together with the layers of wool felt between the layers or pieces of felt, so as to be exposed to the required pressure in the press in order that the wood fiber may be consolidated to the desired extent, after which the layers of felt are removed and a coarse sieve or wire is laid upon the frame *c*, and such frame is turned over, so that the layer of wood felt is delivered from the screen *d* and frame *c* upon the coarse-wire hurdle or sieve.

The coarse-wire sieve and wood felt upon it are removed to a drying-chamber for the evaporation of moisture to the desired extent, after which the layer of wood felt is to be run through between rollers to flatten and consolidate it and smooth the surface and adapt such light, spongy felt sheets or plates of wood felt for use or sale for any of the purposes heretofore indicated, and the layers of wood felt made as aforesaid are very spongy in texture and possess absorbent qualities in addition to being substantially non-conductors of heat or cold.

I claim as my invention—

In an apparatus for the manufacture of wood fiber into plates or sheets, the frame *c* with a sieve *d* attached at the bottom of the frame, and a frame *a* having supporting cross-bars *b*, the inner upper edges of the frame being rabbeted for the reception of the sieve-frame *c*, so that such sieve and frame may rest upon the cross-bars and be adapted to receive into the sieve-frame a layer of wood-pulp, and for the removal of the frame and sieve for pressing the pulp on the sieve previous to its removal from the same, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

ROBERT SPUTH.

Witnesses:

HERNANDO DE SOTO,
WILHELM WIESENHÜTTER.