

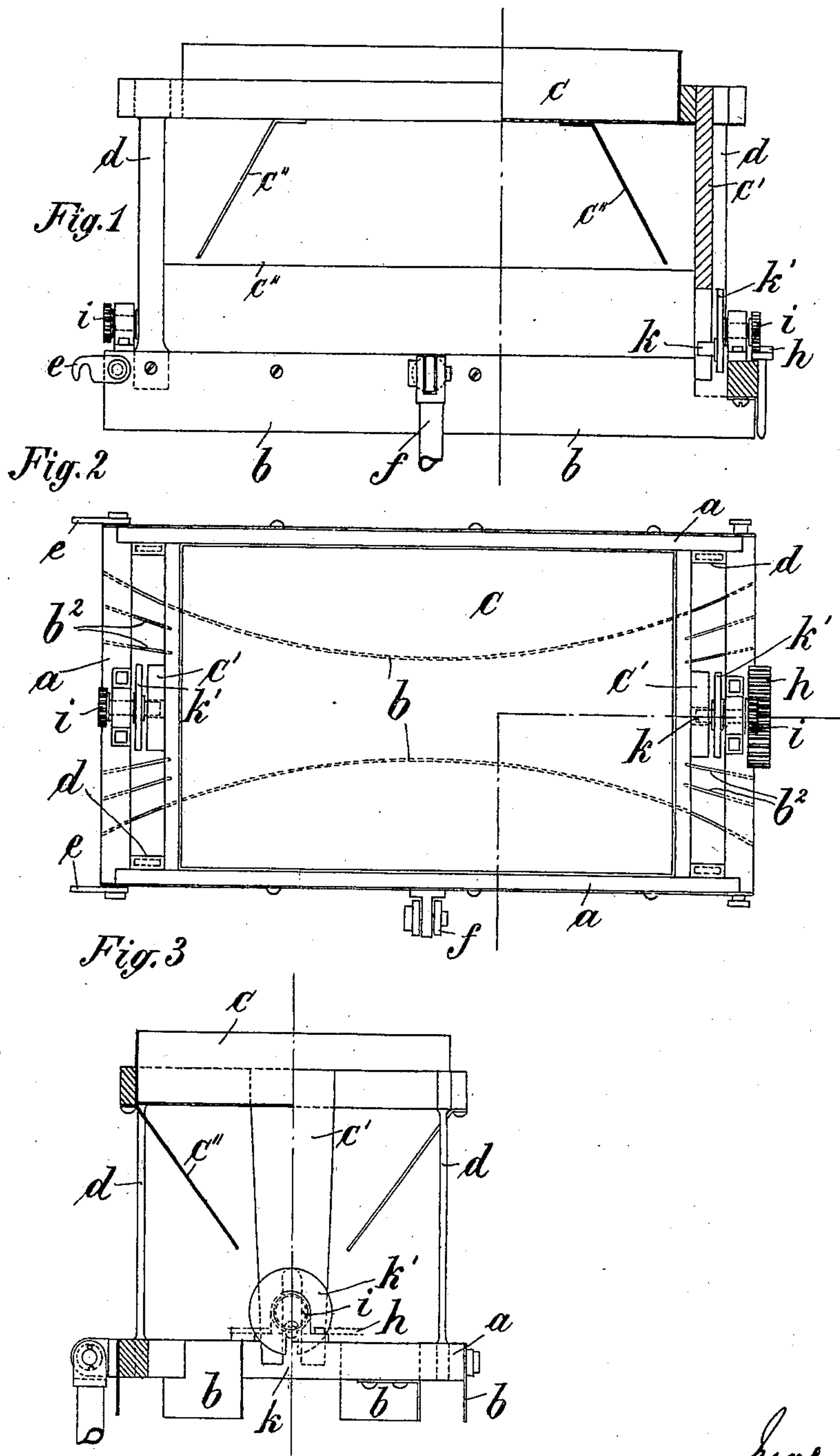
No. 890,596.

PATENTED JUNE 16, 1908.

P. BLAUBACH.

DEVICE FOR FILLING APPARATUS FOR MAKING PATTERNS IN LINOLEUM.

APPLICATION FILED AUG. 6, 1906.



Witnesses
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UNITED STATES PATENT OFFICE.

PAUL BLAUBACH, OF BREMEN, GERMANY.

DEVICE FOR FILLING APPARATUS FOR MAKING PATTERNS IN LINOLEUM.

No. 890,596.

Specification of Letters Patent.

Patented June 16, 1908.

Application filed August 6, 1906. Serial No. 329,516.

To all whom it may concern:

Be it known that I, PAUL BLAUBACH, merchant, a subject of the German Emperor, and a resident at Am Deich 8, Bremen, Germany, have invented Improvements in Devices for Filling Apparatus for Making Patterns in Linoleum, of which the following is a specification.

The present invention relates to apparatus used in making patterns in linoleums and has for its object a device for filling molds, stencils and pattern-apparatus which are required in the manufacture of linoleums in which the pattern goes entirely through the same for the application of the granular linoleum material according to the pattern.

An important object of the present invention is to prevent irregularities in the distribution of the granular material of the covering, which were possible in the hitherto known similar filling devices, by providing guiding and smoothing plates of special shape by which the material is conducted into the corners and to the edges of the frame of the pattern apparatus. An oscillating sieve is provided above the guiding plates, said sieve being joined with the plates forming a whole. The granular linoleum material is put on this sieve. In consequence of the shaking it falls through the meshes of the sieve and is conveyed by obliquely mounted plates in correct quantity and distribution to the smoothing plates, which then push it through the openings of a stencil set on the pattern apparatus in this apparatus, out of which it goes to the supporting fabric or directly on the foundation.

The inner smoothing plates are bent inwards and are for bringing the material sideways, for which also the obliquely placed smoothing plates serve which are arranged at the ends. All the smoothing plates are adapted to be set wider or narrower.

I attain these objects by a device which is illustrated by way of example in the accompanying drawing, in which:—

Figure 1 is an elevation partly in section, Fig. 2 is a plan, and Fig. 3 is an end elevation partly in section.

Similar letters of reference refer to similar parts in all views.

The device consists of a frame *a* which is provided with smoothing plates *b* from end to end, for example, two straight ones outside and two or more curved ones inside and several small ones *b*² placed obliquely at the

ends. The oscillating sieve *c* is above this frame. Four guiding plates *c*² arranged obliquely guide the material falling through the meshes of the sieve to the smoothing plates. The oscillating sieve rests on supports, which are either elastic or rigid, to which the sieve is suspended by hinges.

The devices according to the present invention for applying the material may be placed one beside another in an optional number and be coupled one to another by catches *e*. The motion of the filling devices coupled one with another by means of the catches *e* takes place by hand or by mechanical power by means of the connecting rod *f*. The apparatus are guided on ledges on which the racks *h* are situated, in which the toothed wheel *j*, *i*, engages, said wheel transmitting its revolutions received from the rack *h* to the crank *k*. The latter is adjustable in the disk *k*¹, whereby a greater or smaller motion of the sieve *c* is possible. The disk *k*¹ and the little wheel *i* have a common bearing *l* which is placed on the frame *a*.

The apparatus for filling the molds or stencils, through which the linoleum material is applied to the track of the linoleum, consists of the upper part with oscillating sieve and the lower part on which the stencils or molds are arranged. The lower part consists of a frame *a* on which the curved smoothing plates *b* and the shorter smoothing plates *b*² which are placed slantwise are arranged. Below this frame is situated the stencil or mold through the openings of which the colored linoleum material is passed on to the foundation according to a definite pattern. In the upper part there is situated a perforated bottom so arranged under the sliding or guiding plates *c*² that the granular material falling through the perforated bottom is conducted to the smoothing plates *b*, *b*², in order to be also stroked up to the edge of the mold by the plates *b*² situated at the narrow sides and to completely fill up the edges and corners of the mold. The upper part is connected with the lower part *a* by stays *d* which are either resilient in themselves or are pivotally connected with the frames. The stay *c*¹ is attached at one or two sides to the upper part and is provided below with a slot in which the pin of a disk-crank *k* engages. The latter is provided with a toothed wheel *i* which engages in the racks *h* on the ledges of the frame of the machine. The reciprocating motion which is required for sweeping the

material into the mold can be brought about by hand or by means of a rod *f*. By this motion the one or more toothed wheels *i* and with them the crank *k* are rotated, and the
 5 pin which engages in the slot of the stay *c*¹ shakes the upper part and the bottom of the sieve. On account of this shaking motion of the upper frame, the material falls through
 10 plates *c*² and by these in the lower frame. It is contacted by the smoothing plates *b*, *b*² and swept directly on to the track of the linoleum or into special molds by the stencil situated under the frame. As many of these apparatus
 15 as the pattern has colors are connected with one another, by means of catches *e* or the like.

What I claim as my invention and desire to secure by Letters Patent is:—

20 1. A device for filling appliances used in making linoleums in which the color goes through the same comprising in combination a frame, a sieve, means supporting said sieve above said frame, a plurality of guide plates
 25 under said sieve, a plurality of smoothing plates attached to said frame, means adapted to oscillate said sieve, substantially as described, for the purpose specified.

30 2. A device for filling appliances used in making linoleums in which the pattern goes through the same comprising in combination a frame, a sieve, means supporting said sieve above said frame, a plurality of guide plates under said sieve, a plurality of straight and
 35 curved smoothing plates attached to said frame, means adapted to oscillate said sieve, substantially as described, for the purpose specified.

40 3. A device for filling appliances used in making linoleum in which the pattern goes through the same comprising in combination

a frame, a sieve, flexible means supporting said sieve above said frame, a plurality of guide plates under said sieve, a plurality of smoothing plates attached to said frame, 45 means adapted to oscillate said sieve, substantially as described, for the purpose specified.

4. A device for filling appliances used in making linoleums in which the pattern goes 50 through the same comprising in combination a frame, a sieve, means supporting said sieve above said frame, a plurality of guide plates under said sieve, a plurality of smoothing plates attached to said frame, a crank disk 55 mounted revolubly on said frame engaging said means supporting said sieve, a toothed wheel engaging said crank disk whereby when said toothed wheel is rotated said sieve is oscillated, substantially as described for the 60 purpose specified.

5. A device for filling appliances used in making linoleum in which the pattern goes through the same comprising in combination 65 a frame, a sieve, flexible means supporting said sieve above said frame, a plurality of guide plates attached under said sieve, a plurality of smoothing plates adjustably attached to said frame, a crank-disk mounted 70 revolubly on said frame engaging said means supporting said sieve, a toothed wheel engaging said crank-disk whereby when said toothed wheel is rotated said sieve is oscillated, substantially as described for the purpose specified. 75

In witness whereof I have hereunto signed my name this 21st day of July, 1906, in the presence of two subscribing witnesses.

PAUL BLAUBACH.

Witnesses:

CLARA DIEDERICH,
 PAULINE STÖRHMER.