

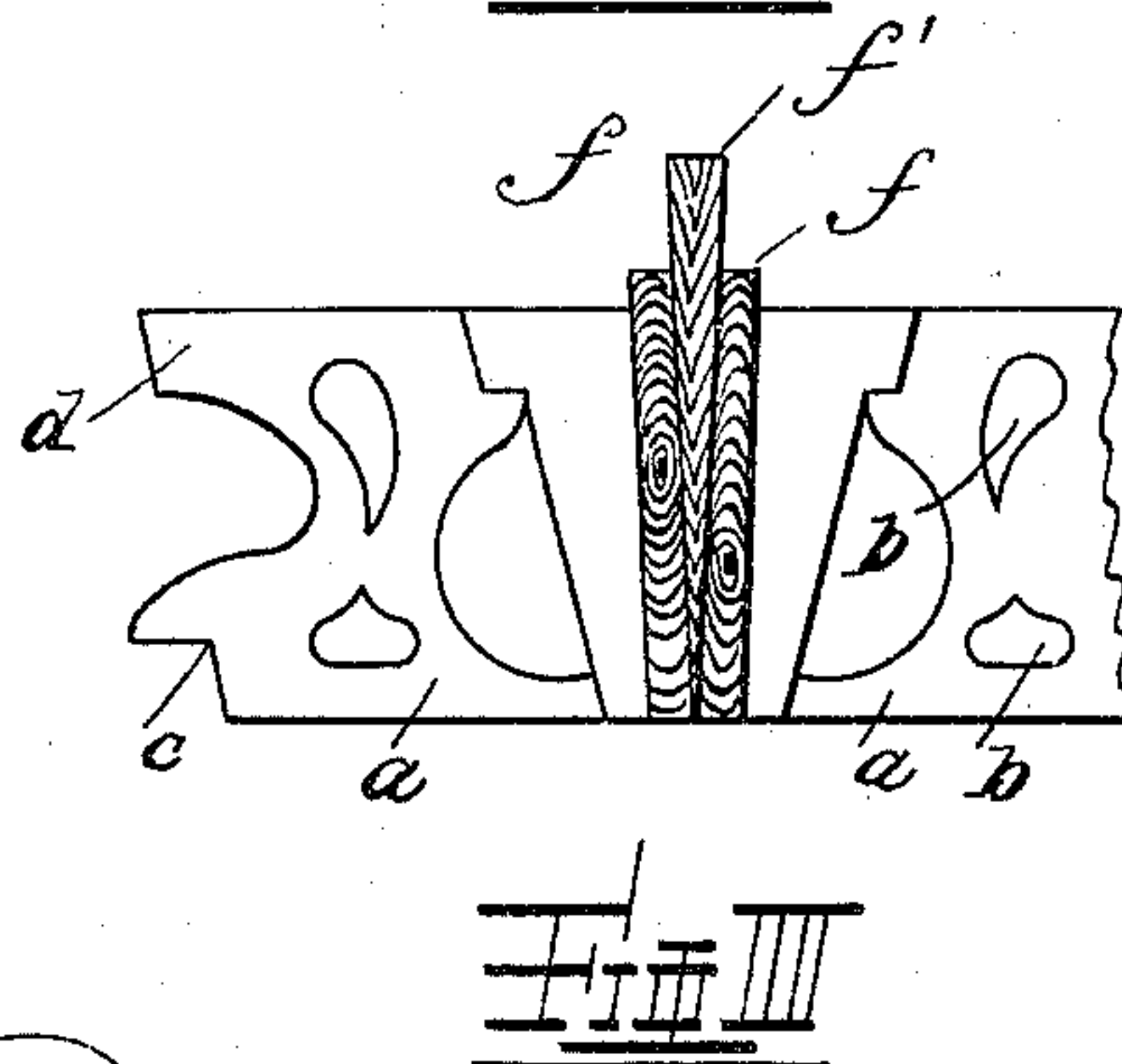
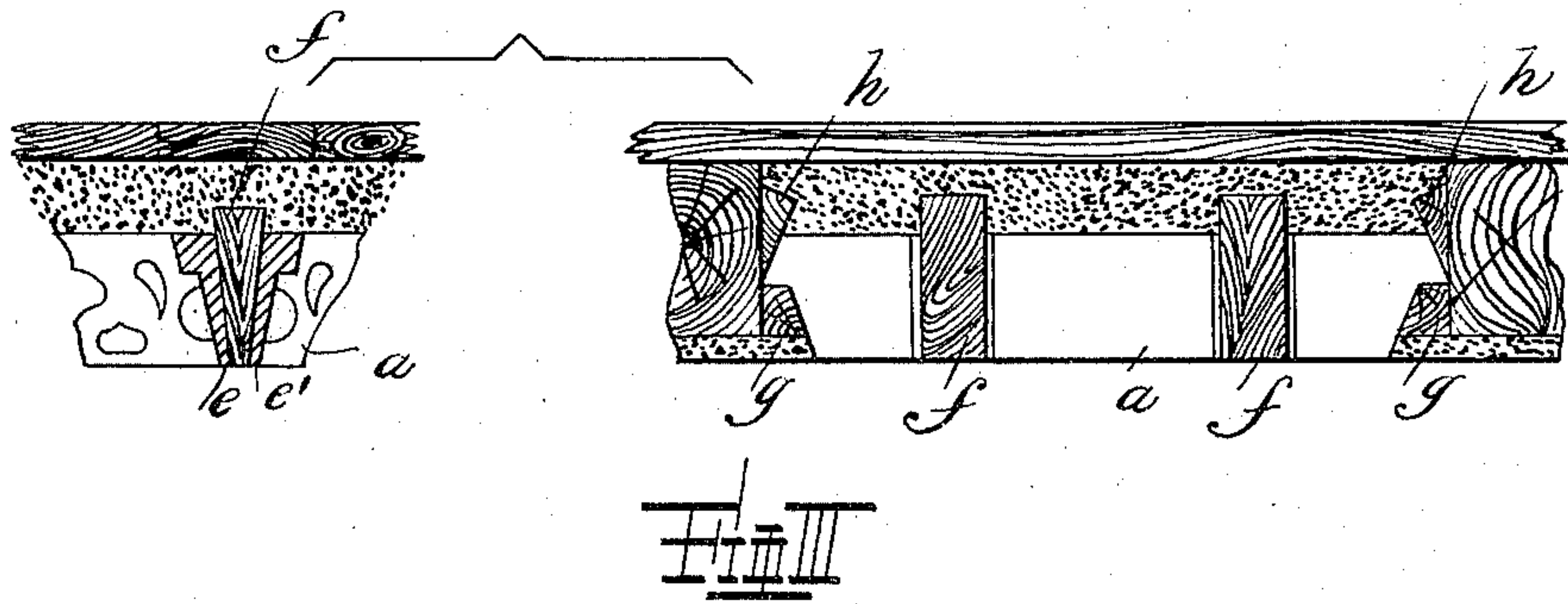
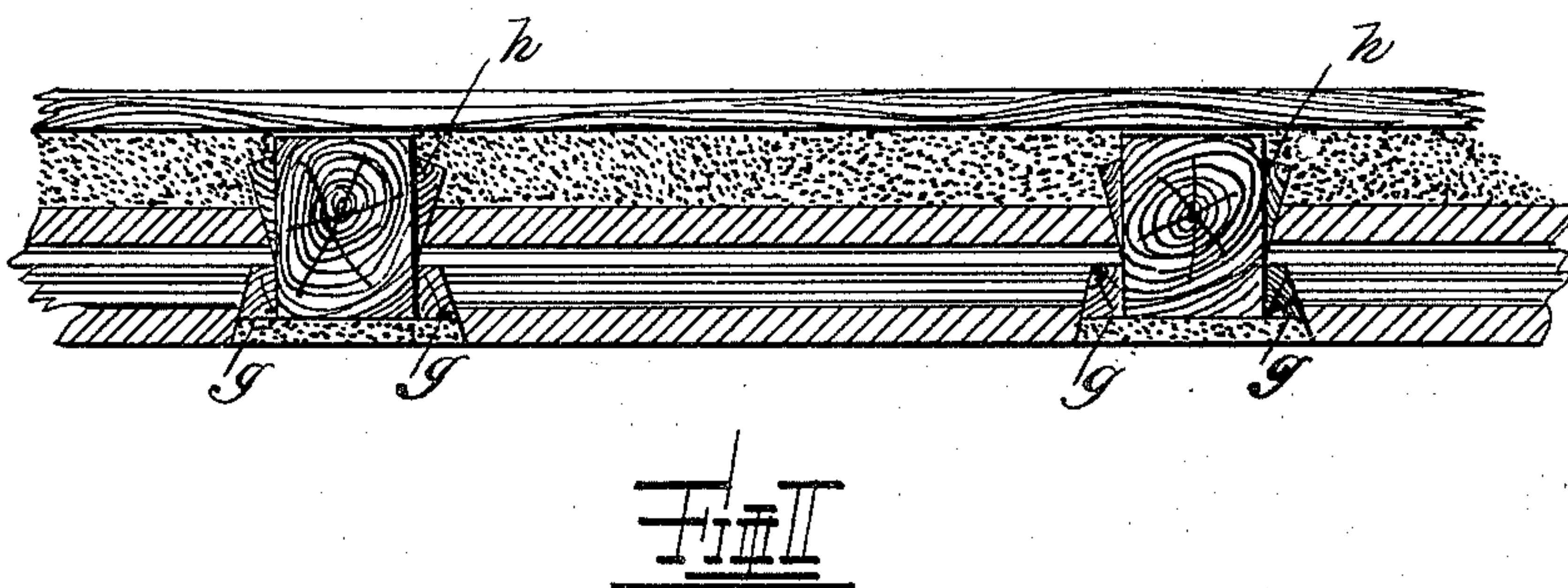
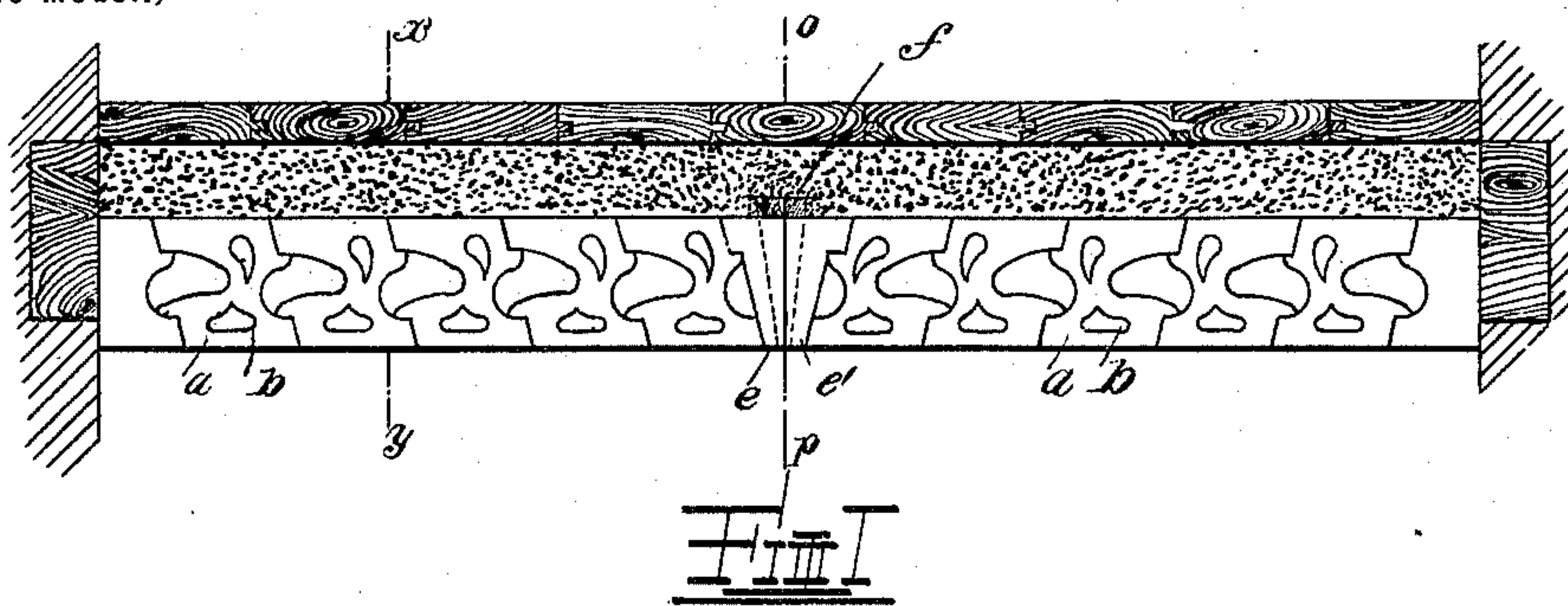
No. 641,091.

Patented Jan. 9, 1900.

A. ELLE.
CEILING.

(Application filed Nov. 16, 1898.)

(No Model.)



Witnesses:
James H. Richmond
Robert Vose

Inventor
Adolph Elle
by *G. Dittmar*
his Attorney

UNITED STATES PATENT OFFICE.

ADOLPH ELLE, OF NEUSTADT, GERMANY.

CEILING.

SPECIFICATION forming part of Letters Patent No. 641,091, dated January 9, 1900.

Application filed November 16, 1898. Serial No. 697,152. (No model.)

To all whom it may concern:

Be it known that I, ADOLPH ELLE, a subject of the Emperor of Germany, residing at Neustadt, (Vila,) Germany, have invented certain new and useful Improvements in Ceilings; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The kind of ceilings made of artificial stones which have been known up to the present are tightened by wedge-pieces in one direction only.

The object of the present invention is to construct a ceiling which is not only tightened in a transverse, but also in a longitudinal, direction. A ceiling constructed in this manner is self-supporting and can therefore be weighted heavier. The parts used in the construction of this ceiling are placed in a slanting position one upon the other from the one and from the other side of the wall, stretching from the opposing ends of the beams. These parts, which are placed in a diverging position to each other, are tightened by wedge-shaped pieces of gypsum, and the bearing strength may be increased by filling in fluid gypsum at the upright joints and the seat of the joints. As the separate parts rest against each other they weight the beams less. The transverse tightening is effected by wedge-shaped pieces of wood which are inserted between the beams and the slanting surfaces of the parts. The supporting on the lateral beams is effected by nailing laths thereon.

Figure 1 is a longitudinal elevation of a ceiling constructed in accordance with my invention. Fig. 2 is a section on line *x y* of

Fig. 1. Fig. 3 is a section on line *o p*, Fig. 1; and Fig. 4 is a detail of the wedge-fastening.

a are pieces of gypsum provided with perforations *b*, which are furnished with incisions *c* and projections *d*. These pieces of gypsum are placed in such a manner upon one another that they stand in a diverging position to each other. Thus the beams are weighted less. In the center these pieces of gypsum are tightened by wedge-shaped pieces of gypsum *e e'*. This tightening may be increased by inserting one or more wooden wedges *f*, which again may be wedged by a third piece *f'*.

g g are wedge-shaped laths nailed on to serve as supports for the gypsum pieces.

Wedge-shaped pieces of board *h* are employed for the transverse tightening.

The leveling to the top edge of the beam is effected by means of dry sand or ashes.

I claim—

A ceiling composed of divergent and perforated blocks of gypsum having a heel portion and a recess at opposite sides whereby they are adapted to be united side to side, forming an integral plate, which is supported at its extremities upon wedge-shaped laths *g* attached to the joists or entablature of the ceiling, and wedge-fastenings *f* and reinforcing-strips *f'* adapted to be driven between the blocks centrally of the joists, whereby said blocks may be tightened transversely and longitudinally with respect to the joists, substantially as herein shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

ADOLPH ELLE.

Witnesses:

FRANZ STEPHANS,
GUSTAV RÜRKERT.