

T. KARAS.
FLOOR CONSTRUCTION.
APPLICATION FILED APR. 2, 1910.

1,055,329.

Patented Mar. 11, 1913.

2 SHEETS—SHEET 1.

Fig. 1.

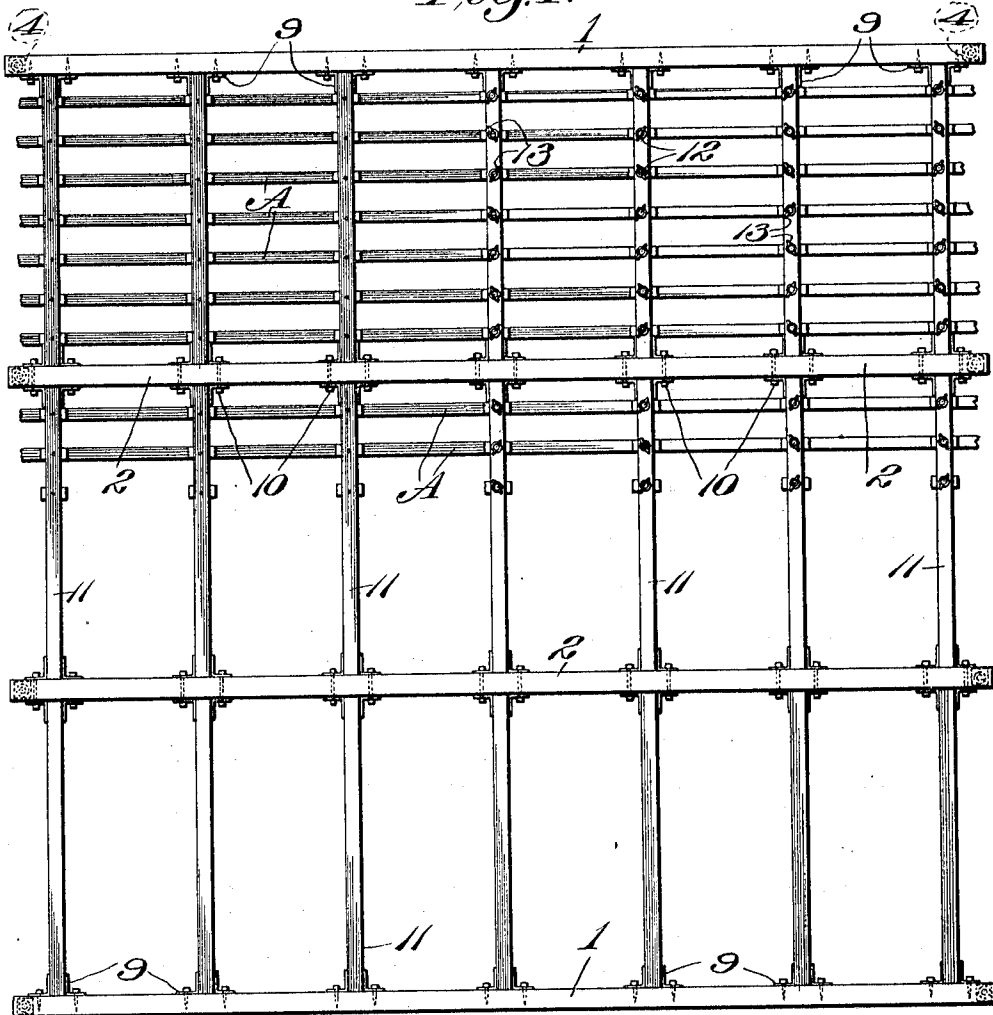
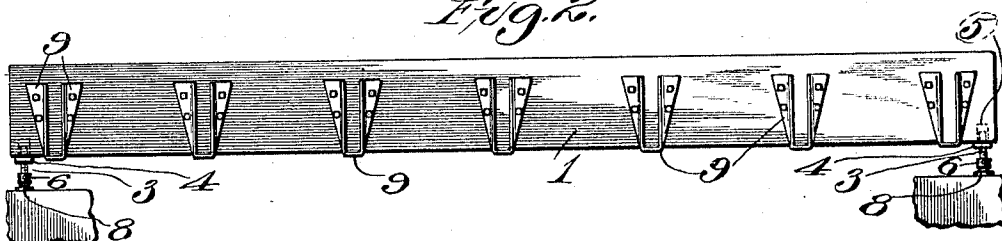


Fig. 2.



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2 SHEETS-SHEET 2.

Fig. 4.

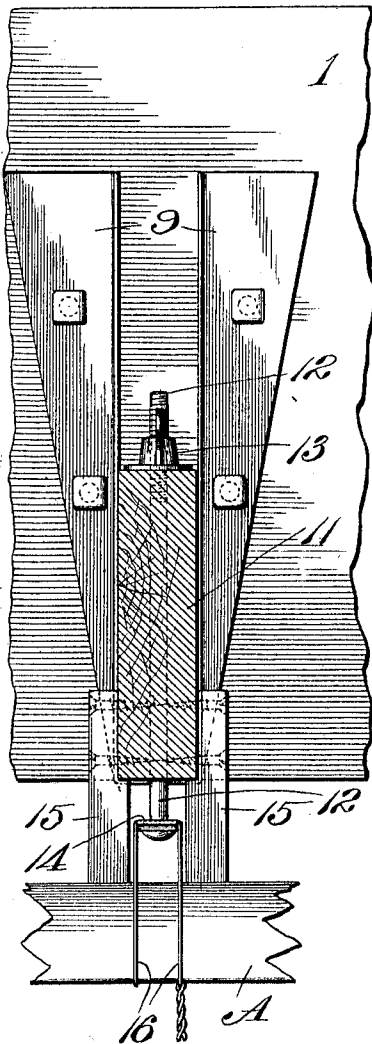
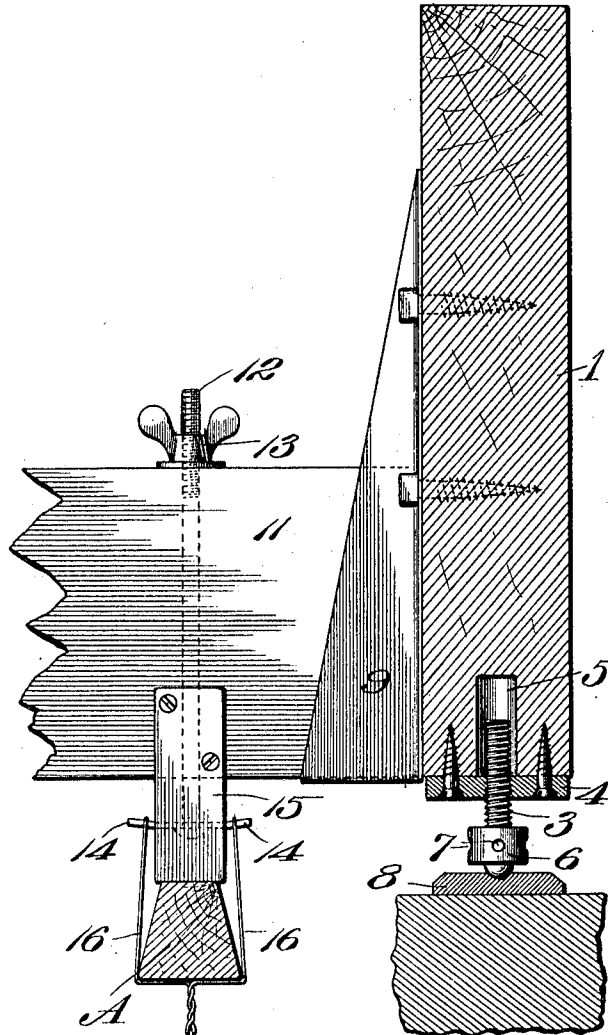


Fig. 3.



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UNITED STATES PATENT OFFICE.

THOMAS KARAS, OF ST. LOUIS, MISSOURI.

FLOOR CONSTRUCTION.

1,055,329.

Specification of Letters Patent.

Patented Mar. 11, 1913.

Application filed April 2, 1910. Serial No. 553,018.

To all whom it may concern:

Be it known that I, THOMAS KARAS, a subject of the Emperor of Austria-Hungary, residing at 2106 Sidney street, in the city of St. Louis, State of Missouri, have invented a new and useful Improvement in Floor Construction, of which the following is a specification.

This invention relates to floor construction, and more particularly to the construction of floors of concrete and other materials which are positioned while in a plastic state, and then permitted to harden or solidify, and in which are embedded sleepers or sills to which the wood superstructure portion of the floor may be secured. The strips which have been so used are usually of thin wood. It is difficult to adjust strips of any size or dimensions in the same level or horizontal plane since no adjusting or leveling frame or device for that purpose has been devised. When the strips are uneven the sleepers will also be held in uneven adjustment with the result that the flooring will conform to the sleepers and be uneven and imperfect and unsightly.

The object of the present invention is to provide an apparatus for use in floor construction of the character referred to, comprising a frame with means in connection therewith for supporting the sleepers in exact and positive adjustment with respect to each other, and to said frame, so that the plastic floor material may be located without dislocating any of the sleepers from their proper adjustment. After the plastic material has become hardened the sleepers will be firmly and rigidly held therein and the flooring laid on the sleepers thus arranged will be smooth, even and level throughout.

Other objects will appear from the following description, reference being made to the accompanying drawings, in which I have illustrated one embodiment of my invention, and in which—

Figure 1 is a plan view of a frame of the character containing my invention showing a number of the floor sleepers held in position by said frame. Fig. 2 is a side elevation of one of the main supporting members of the frame. Fig. 3 is an enlarged view showing one of the main supporting members in section and the devices for supporting the floor sleepers. Fig. 4 is a sectional view of the parts supporting the floor sleepers.

A preferred construction of the frame includes side supporting members 1, and one or more intermediate supporting members 2. The members 1 and 2 are strong and inflexible and may be supported by adjustable screws 3. These adjustable screws operate through the metallic plates 4 fastened to the lower edges of the members 1 and 2 and extend into holes 5 in said members. The lower ends of the screws 3 have heads 6, rigid or integral therewith, and constitute means for engagement for purposes of turning the screws to adjust the members 1 and 2 in proper position. The heads 6 may be polygonal to be engaged by a wrench or similar device or may contain holes 7 for the reception of any implement in rotating the screws. Suitable supports 8 constitute bearings for the ends of the screws 3 as may be seen in Fig. 3. The side members 1, at suitable intervals on their inner sides, have stirrups or brackets 9 screwed thereto. The members 2 on each side thereof have similar brackets 10 matching the brackets 9 on the side members. These brackets constitute supports for the members 11 whose ends rest in said stirrups. At intervals corresponding to the space separating the sleepers, rods or bolts 12 extend through the members 11, having their upper ends threaded and provided with manually operable nuts 13 whereby said rods may be moved. Upon the lower end of each of the rods 12 a metallic member 14 is supported. Abutment posts 15 are attached to the sides of the members 11 opposite the bolts 12.

In using my invention the frame is assembled substantially as shown in Fig. 1 in which the frame is constructed in dimensions corresponding to the number of sleepers to be supported or adjusted. When the frame has been assembled and adjusted in this way the sleepers A are connected with the frame by use of wire loops 16 passing under the sleepers and over the ends of the parts 14 as shown in Fig. 3. Nuts 13 are then operated to draw upwardly the rods or bolts 12 until the sleepers A are in rigid contact with the lower ends of the abutment posts 15. Preferably each sleeper is connected with all of the members 11 by use of the rods 16 though in some instances it may be found unnecessary to make the connection between the sleepers and all of the said members 11. Having been adjusted in this manner, the floor material may then be placed so as to

embed as much of the sleepers as desired, and this may be done without danger of displacing any of the sleepers which will be firmly and securely held. After the floor material has become hardened or solidified the loops 16 may be cut even with the upper surface of the floor material and the frame may then be moved for use in constructing additional flooring. It will be observed that by use of this device it is unnecessary to remove the supporting loops after the floor material hardens, said loops remaining embedded therein.

I am aware that there may be various modifications of my invention, and that it may be used for other purposes without departing from the principles thereof. I do not restrict myself to identical features of construction or specific uses, but

What I claim and desire to secure by Letters Patent is—

1. An apparatus for leveling and holding sleepers designed to be embedded in plastic or molded floor construction, comprising side members, screws for adjusting said side members in level adjustment, stirrups attached to said side members, cross members having their ends removably located in said stirrups, a series of bolts adjustably carried by each cross member, arms extending from the lower end of each bolt, means adapted for detachably connecting the sleepers to said arms, and abutments for the sleepers on said cross members.

2. A frame for adjusting floor-sleepers which are designed to be embedded in plastic or molded floors comprising side members, leveling screws supporting said side members, brackets attached to the inner sides of said side members, cross members having their ends resting in said brackets, bolts loosely mounted in holes in said cross members, arms carried on the lower ends of said bolts, loops engaged over said arms and arranged to detachably support the floor sleepers, abutments on said cross members close to said bolts whereby said bolts may be drawn upwardly effectively to draw the floor sleepers against said abutments prior to said sleepers being molded into the floor, substantially as specified.

3. A device for holding sleepers which are to be embedded in plastic or molded floors, comprising a separable frame, abutments in the same horizontal plane at the lower side of said frame, supports for detachably holding the floor sleepers, and means for operating said supports effectively to draw said sleepers against said abutments prior to said sleepers being molded into the floor, substantially as described.

4. A device for use in floor construction and the like adapted for holding sleepers which are to be embedded in a plastic or molded floor, comprising a frame comprising horizontal side members, brackets attached to said side members, transverse members removably supported by said brackets, adjustable devices carried by said transverse members, and detachable supports for the floor sleepers carried by said adjustable devices, substantially as specified.

5. A device for use in floor construction and the like adapted for holding sleepers which are to be embedded in a plastic or molded floor, comprising a frame comprising horizontal side members, brackets attached to said side members, transverse members removably supported by said brackets, adjustable devices carried by said transverse members, detachable supports for the floor sleepers carried by said adjustable devices, and abutments for the sleepers on said transverse members, substantially as specified.

6. A device for use in floor construction and the like adapted for holding sleepers which are to be embedded in a plastic or molded floor, comprising a frame comprising horizontal side members, transverse members removably supported by said side members, and devices supported by said transverse members for upholding and adjusting the floor sleepers prior to their being embedded in the floor, substantially as described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

THOMAS KARAS.

Witnesses:

FRANKLIN MILLER,
B. F. OREAR.