No. 614,725. Patented Nov. 22, 1898.

J. JUNGBLUTH.

APPARATUS FOR CONSTRUCTING INSULATING BLOCKS.

(Application filed Jan. 18, 1898.)

(No Model.)

Fig. 1.

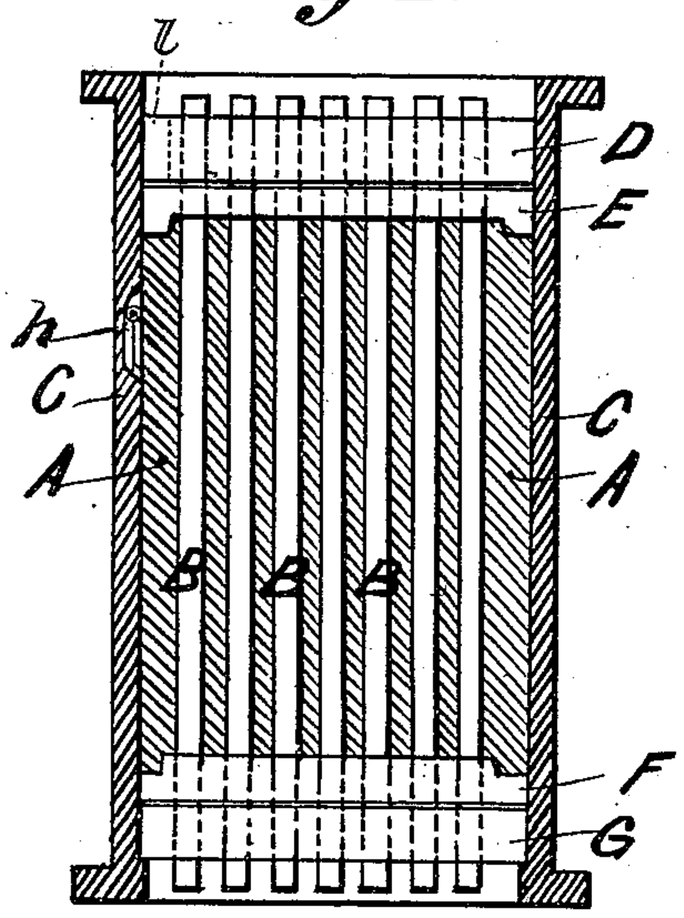


Fig. 2.

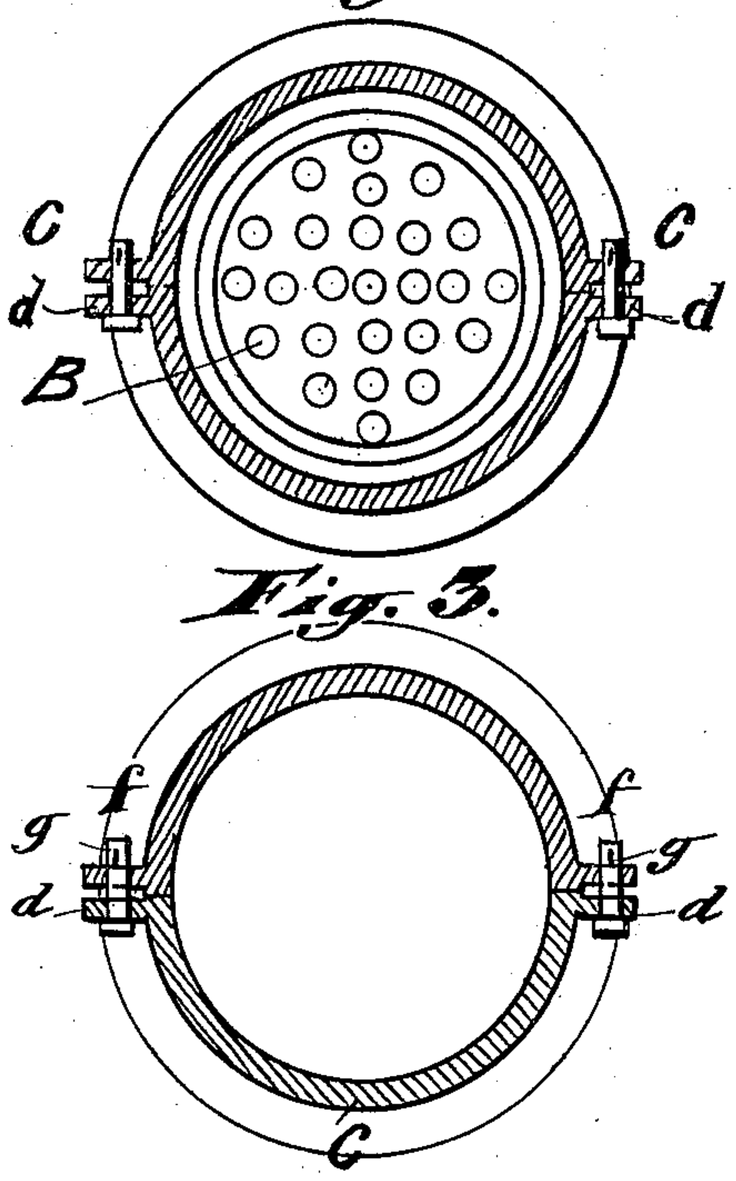


Fig. 3.

Fig. 4.

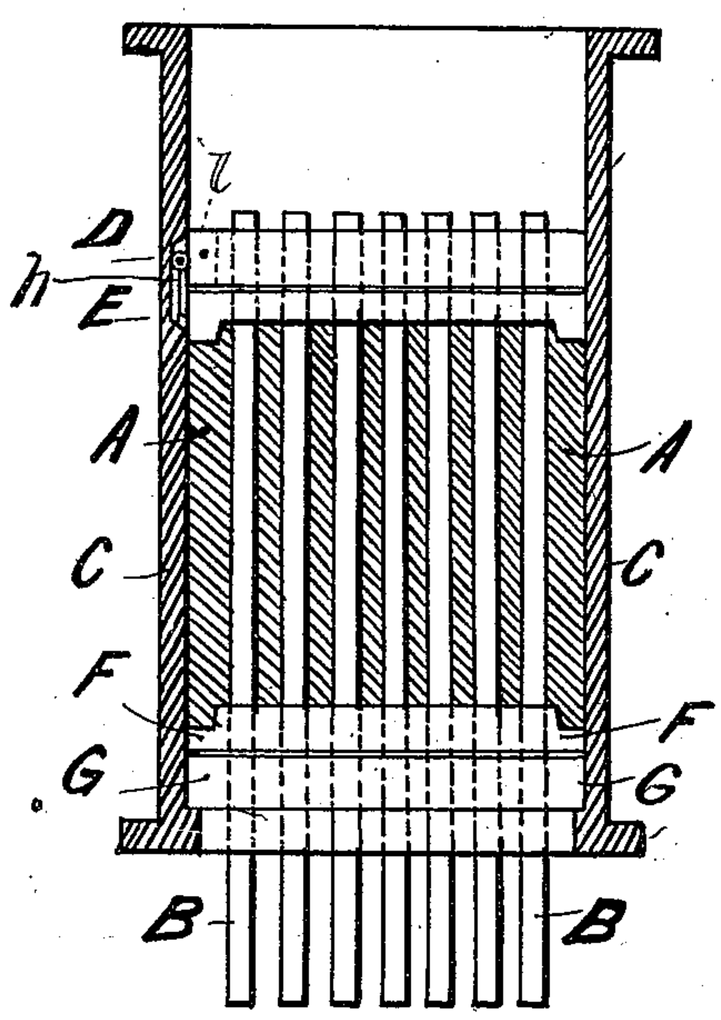


Fig. 5.

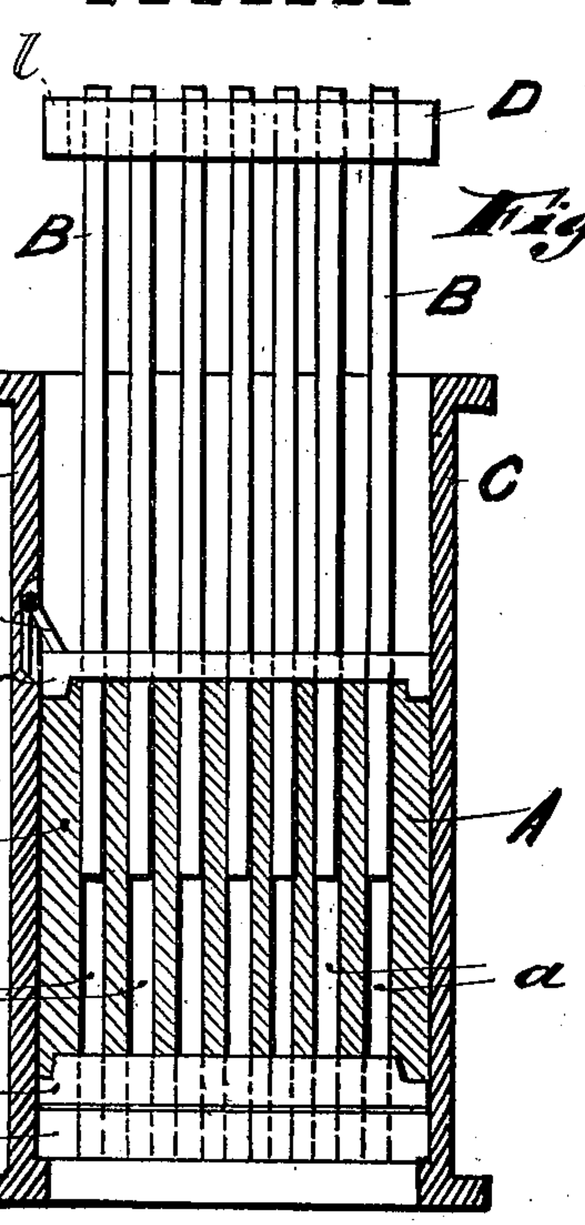
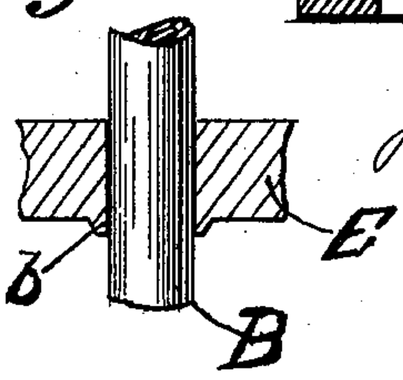


Fig. 6.



WITNESSES:

Wm. D. Bell.

Louis Snyder.

INVENTOR:

Johann Jungbluth

by Gartner & Co Attys

UNITED STATES PATENT OFFICE.

JOHANN JUNGBLUTH, OF COLOGNE, GERMANY.

APPARATUS FOR CONSTRUCTING INSULATING-BLOCKS.

SPECIFICATION forming part of Letters Patent No. 614,725, dated November 22, 1898.

Application filed January 18, 1898. Serial No. 667,098. (No model.)

To all whom it may concern:

Be it known that I, JOHANN JUNGBLUTH, architect, a citizen of Germany, residing at 86 Friesenwall, Cologne, in the Empire of Germany, have invented a certain new and useful Apparatus for Constructing Insulating-Blocks, of which the following is a specification.

My invention relates to tubular insulating-conduits for the reception of electrical wires or other conductors. Such conduits are at present usually constructed by means of a series of blocks of asphalt, cement, &c., which are provided with registering passages that form continuous ducts in which the wires are laid.

My invention particularly refers to the production of blocks of asphalt to be used for the purpose above referred to; and it consists in means for constructing the said asphalt blocks.

My invention is fully illustrated in the accompanying drawings, in which—

Figure 1 is a vertical sectional view of a mold containing material ready to be pressed and showing the position of the parts before the compression of said material is effected. Fig. 2 is a horizontal sectional view of what appears in Fig. 1. Fig. 3 is a horizontal sectional view of the shell of the mold, showing the means for securing its sections together. Fig. 4 is a view similar to that shown in Fig. 1, but illustrating the parts of the mold after the compression of the material has been effected. Fig. 5 illustrates the position of the parts of the mold while the movable member thereof is being extracted, and Fig. 6 is an enlarged detail view of a portion of the upper matrix of said mold.

In said drawings, C represents a cylindrical shell that is provided with an internal flange at its lower end and that is formed in two sections, the shell being longitudinally divided to form them. Said sections are detachably held together by means of fastenings *f*, consisting of ears *d* and bolts *g*, penetrating said ears. Upon the bottom flange rests a plate G, and upon said plate G rests a second plate F. The former of these plates should be removably arranged within the shell, though as to the latter it is not material whether or not it be so arranged. Above the plate F is a third plate E, that is likewise removable and between which and the plate F the compression of the material to be formed is effected. Upon the plate E is adapted to be placed the pressure-plate D of considerable weight. This plate D carries the downwardly-projecting bars or tubes B, that form in the finished block the apertures or ducts through which the electric wires are to be conducted. For the reception of the said rods or tubes B the plates E, F, and G are of course penetrated with openings that register with said rods or tubes.

The compression of the material need not depend entirely upon the weight of the pressure-plate D manifestly, and it is obvious that other and auxiliary means may be employed. Whether such other means is or is not employed, when it is desired to withdraw the application of pressure after the necessary compression has been effected catches *h* (shown in Figs. 1, 4, and 5) act to secure the upper plate E against upward movement in an obvious manner, and thus maintain the block under compression. When the pressure-plate is in use, a recess *l* in the side thereof accommodates the catch *h*.

In order that the tongue-and-groove arrangement for joints at the meeting ends of any two blocks may be formed, the plates E and F may be so constructed as to present to the ends of the blocks the shape which it is intended they should take. For this reason the plate F, for instance, may be provided with a projection and the plate E with a recess, as shown in the drawings.

It is obviously desirable, so as not to present any obstruction to the introduction of the wires, to remove the square corners that surround the entrance to each duct, and for this purpose I provide annular tapering bosses *b* about the openings in the plates E and F.

The operation of the apparatus as above described will be obvious without description.

I have discovered that it is highly desirable in order to increase the impermeability of the article after its removal from the mold to introduce the asphalt to the mold in powdered form and to effect the compression of the same under the application of heat.

Though I have hereinbefore referred to both

the tubes and the rods as suitable for forming the ducts in the block, it is obvious that the former are preferable, since by their use not only hot air while the block is being heated under compression, but cool air while the block is being cooled after said compression, may be conducted to the interior of said block.

Having thus fully described my invention, I claim—

1. A mold consisting of a shell closed at its lower end, a removable gravity-actuated pressure-plate closing the upper end of said shell, tubes carried by said pressure-plate and penetrating the same and the other closure of said shell, forming plates or matrices interposed between the removable plate and the lower closure of said shell and also penetrated by said tubes, and a catch or catches for the upper forming-plate, substantially as described.

2. A mold consisting of a shell provided with an internal flange at its lower end and divided longitudinally to form separable sections, a plate G supported on said flange, a removable pressure-plate closing the upper end of said shell, tubes carried by said pressure-plate and penetrating the same and the other plate, forming plates or matrices interposed between the plate G and the removable or pressure plate and also penetrated by said tubes, a catch or catches for the upper matrix and means for securing said sections together, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand this 27th day of December, 1897.

JOHANN JUNGBLUTH.

Witnesses:

WILLIAM H. MADDEN,

FRITZ LANGEN.