## H. HUEBSCHER.

Improvement in Material for Musical Instruments.

No. 130,641.

Patented Aug 20, 1872.

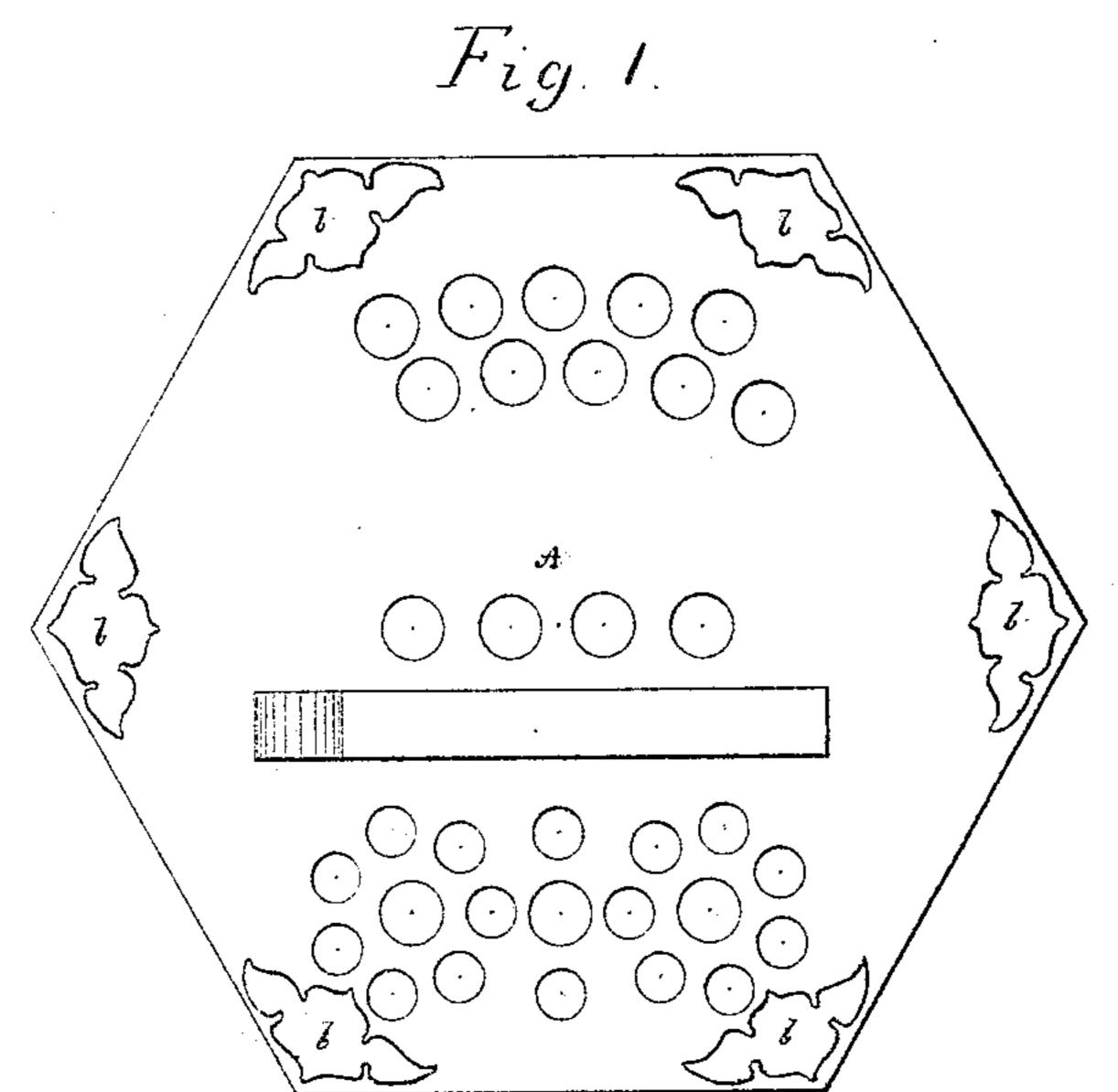


Fig. 2.

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## UNITED STATES PATENT OFFICE

HEINRICH HUEBSCHER, OF KLINGENTHAL, GERMANY.

## IMPROVEMENT IN MATERIALS FOR MUSICAL INSTRUMENTS.

Specification forming part of Letters Patent No. 130,641, dated August 20, 1872.

Specification describing certain Improvements in Musical Instruments, the invention of Heinrich Huebscher, of Klingenthal, in the Kingdom of Saxony, German Empire.

In manufacturing various kinds of musical instruments or parts thereof, as, for instance, the covers and cases of accordeons and concertinas, the bottoms, key-boards, holders or supports, and stops of stringed instruments, the tubes of flutes, flageolets or picolo-flutes, and drum-pipes, clarionettes, hautboys, and bassoons, it has hitherto been the custom to use wood for making the same. This employment of wood is subject to decided disadvantages, for when instruments of the description mentioned have been exported to warm or hot climates, a large percentage of them arrived at their destination in a damaged state, being either partially broken or partially cracked or torn. It accordingly has been the inventor's aim, in manufacturing instruments of the description named, to replace the material hitherto employed—namely, wood—by other materials which, without deteriorating the value of the instrument with regard to its sound, will not be subject to the injuries described above, such as tearing, cracking, and breaking. To this end, the inventor, after numerous trials and experiments, has found that the best substitute for the material heretofore used for the purposes named is woodpaste soaked in glycerine, inasmuch as said material, while meeting every requirement as above specified, has the advantage of admitting the easy and more secure application of certain embellishments and inlaid ornaments with which it is customary to decorate a particular class of instruments.

In the accompanying drawing, Figure 1 represents an outside face view, and Fig. 2 an edge view of a concertina cover made of woodpaste soaked in glycerine.

In manufacturing the instruments or parts of instruments with wood-paste soaked in glycerine, the wood paste or pulp, as employed by paper manufacturers, is moistened with water to a stiff plastic pulp, and to this is added glycerine for the purpose of accelerating the drying and to facilitate after manipulation. The ornaments or inserted parts b b are not placed in the cover A until the latter is, in a measure, completed—that is, after it has been pressed into the molds in the following manner: The plastic mass, having been pressed into the cover-mold, is next overlaid with a thick slimy color-varnish. The ornaments are then inserted by pressure, and the ornamented article or cover dried. Varnish is then again drawn over the entire article, including the ornaments, and if necessary this is repeated a third time; drying again takes place, and finally, by way of polishing, the entire surface is ground with emery and polishing disks or wheels.

What I claim as my invention, and desire

to secure by Letters Patent, is-

The construction of musical instruments or certain parts thereof, usually made of wood, of wood-paste saturated with glycerine, substantially as specified.

This specification signed by me this 26th

day of April, 1872.

HEINRICH HUEBSCHER.

Witnesses:

CARL HEINRICH KNOOP, J. EDMOND THODE.