(No Model.)

W. F. WHITING.

PROCESS OF PLATING INGOTS.

No. 385,783. Patented July 10, 1888.

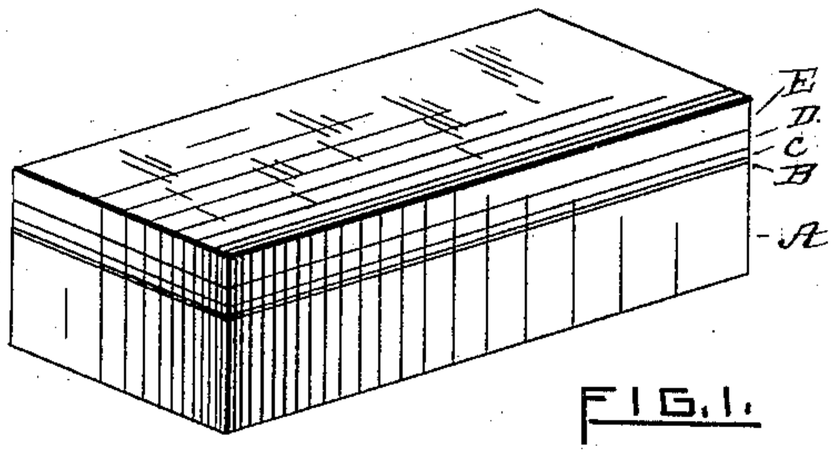


FIG. 1.

FIG. 2.

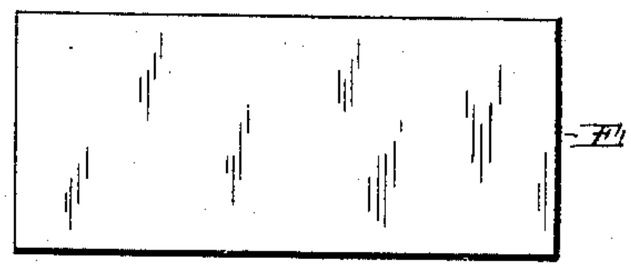


FIG. 3.

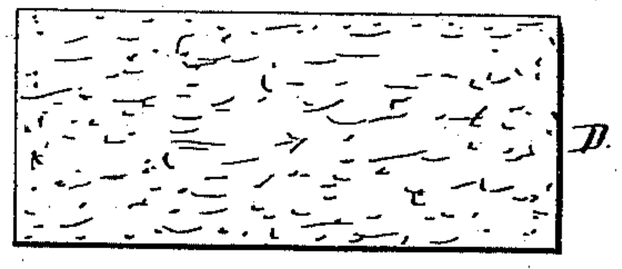


FIG. 4.

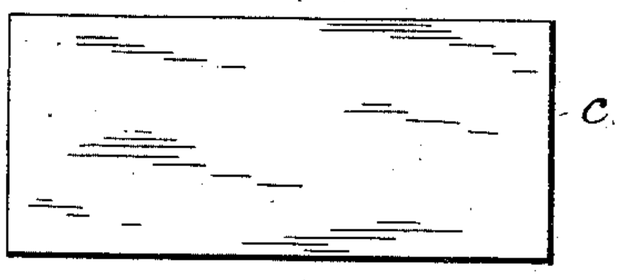


FIG. 5.

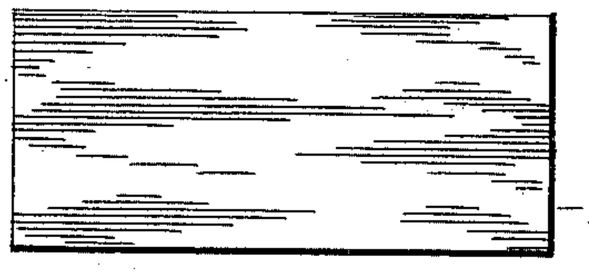
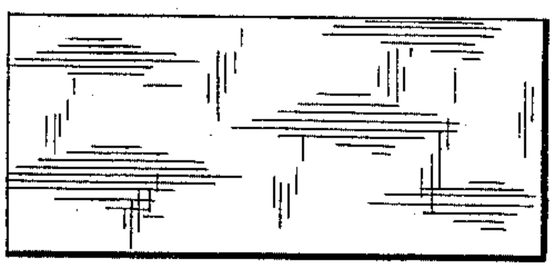


FIG. 6.



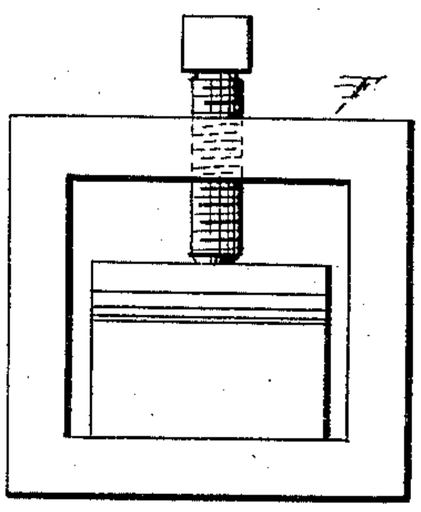


FIG. 7.

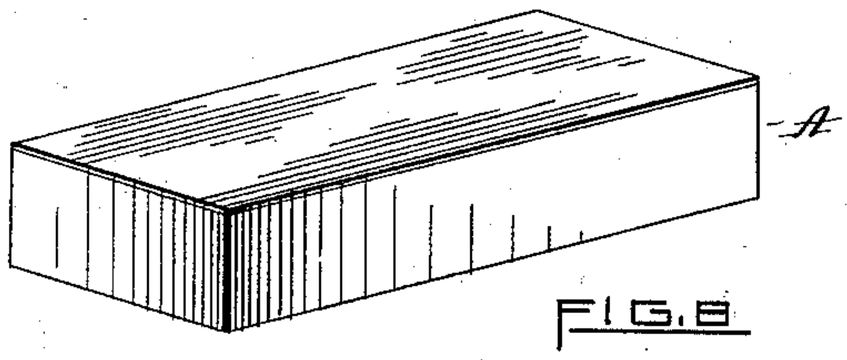


FIG. 8.

WITNESSES.

Dav.d E. D. Granger.

P. H. Adamson.

INVENTOR.

William F. Whiting.

By Walter B. Vincent, Atty.

UNITED STATES PATENT OFFICE.

WILLIAM F. WHITING, OF PROVIDENCE, RHODE ISLAND.

PROCESS OF PLATING INGOTS.

SPECIFICATION forming part of Letters Patent No. 385,783, dated July 10, 1888.

Application filed March 26, 1888. Serial No. 268,580. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM F. WHITING, of Providence, in the State of Rhode Island, have invented a new and useful Process for Plating Ingots; and I do hereby declare that the following specification, taken in connection with the drawings, making a part of the same, is a full, clear, and exact description thereof.

Figure 1 shows the ingot prepared for the plating process. Fig. 2 is a top view of the steel plate. Fig. 3 is the asbestus board. Fig. 4 is the paper sheet. Fig. 5 is the sheet of plate. Fig. 6 is the base metal. Fig. 7 is an end view of Fig. 1, secured in the clamp. Fig. 8 is a view of the ingot after coming from the furnace.

The process heretofore employed for plating the ingot in the manufacture of what is termed "rolled plate" consists in first placing the sheet of gold upon the base metal, then covering the gold with a sheet of paper, and afterward placing on top of all a thick steel plate. After the several parts are thus put together, the whole is placed in a frame or clamp and the gold brought in close contact with the base metal by a set-screw, which forces down the steel plate. The whole is now ready for the furnace, the paper serving to prevent the adhesion of the gold to the steel plate until the solder, which is placed upon one side and drawn through by the heat, has time to act. It is impossible in this process to retain upon the steel plate a smooth level surface, so that a like pressure upon the gold sheet will be exerted in all places. This variation of pressure affects the adhesion of the gold plate to the base metal in places where the pressure is lightest, and results in the blistering or raising up of the gold when the ingot is subsequently rolled down, the disadvantages of which will be obvious. In my invention I overcome these difficulties and secure an even pressure over the entire surface by introducing between the steel plate and the paper sheet an asbestus board, which will resist the action of the fire and serve as a cushion to equalize the pressure, and by it conform itself to any inequalities that may exist in the steel plate or in the ingot itself, so that the same degree of pressure will be exerted throughout and all blistering or imperfect places will be avoided.

In the drawings, A is the base metal, B the gold plate, C the paper sheet, D the asbestus board, and E the steel plate, and they are placed together in the order named.

F is a clamp in which the whole is secured.

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

The process of plating ingots herein described, consisting, in addition to the means heretofore employed, of the introduction of an asbestus or other non-inflammable material for equalizing the pressure, as and for the purposes specified.

WM. F. WHITING.

Witnesses:
E. F. WARNER,
WALTER B. VINCENT.