

(No Model.)

M. HECHT.
PROCESS OF ORNAMENTS WOODEN SURFACES.
No. 437,648. Patented Sept. 30, 1890.

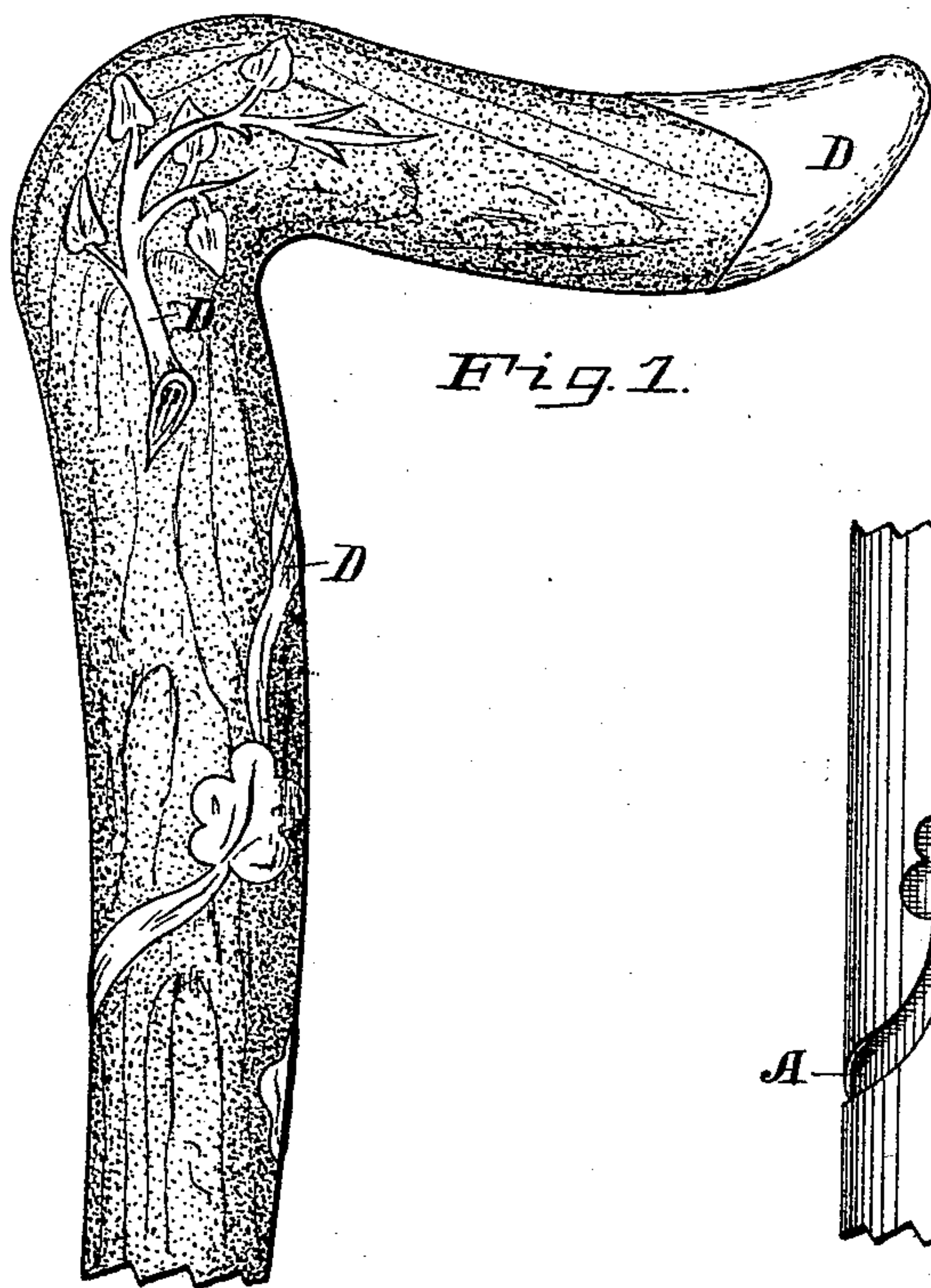


Fig. 1.

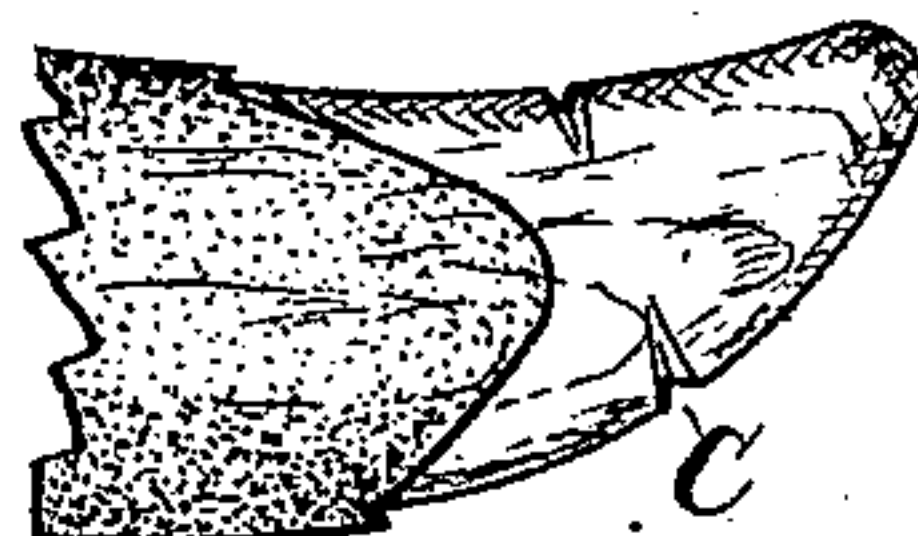


Fig. 2.

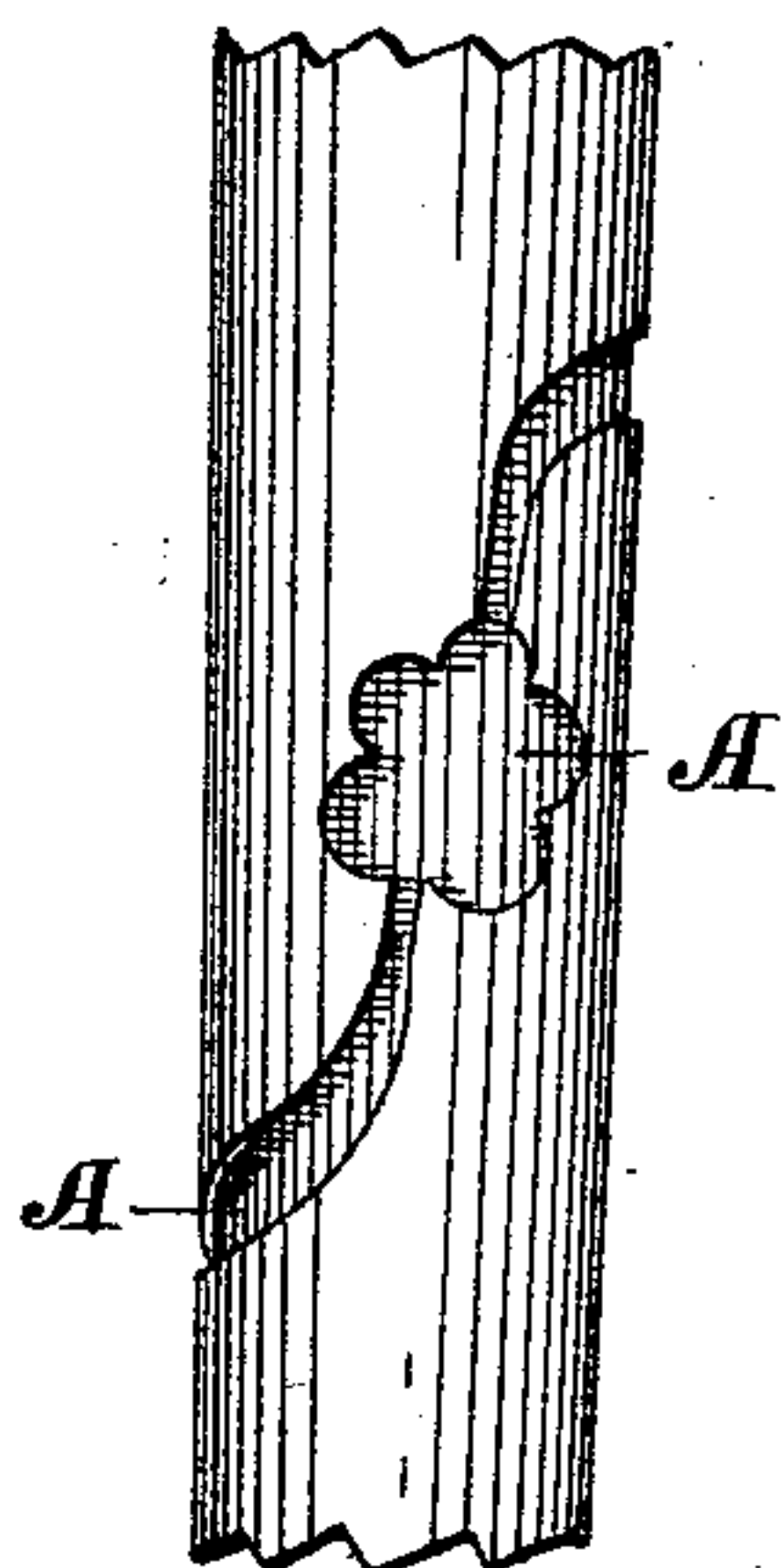


Fig. 3.

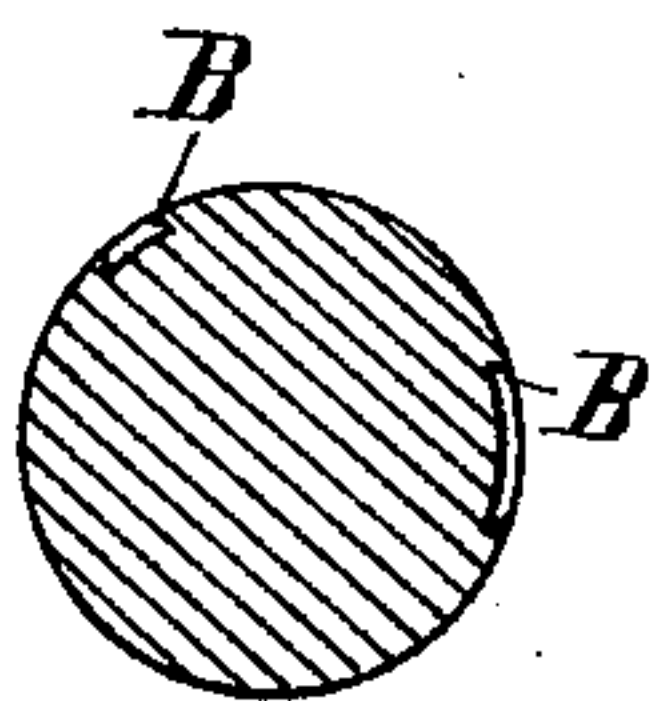


Fig. 4.

WITNESSES:

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PROCESS OF ORNAMENTING WOODEN SURFACES.

SPECIFICATION forming part of Letters Patent No. 437,648, dated September 30, 1890.

Application filed July 5, 1890. Serial No. 357,707. (No specimens.)

To all whom it may concern:

Be it known that I, MYER HECHT, a citizen of the United States, and a resident of the city, county, and State of New York, have invented certain new and useful Improvements in the Process for Ornamenting Wooden Surfaces, of which the following is a specification.

Figure 1 is a side view of a cane or handle provided with metallic ornaments; Fig. 2, a view of portion of the handle with the metallic tip removed; Fig. 3, a view of body of the handle, showing the carved or grooved portion into which the metal for ornamentation is deposited; and Fig. 4, a cross-section of the body of the handle, showing the undercut of the carved or grooved portion.

The object of my invention is to provide a process for ornamenting wooden, ivory, or other non-metallic surfaces—such as umbrella-handles, canes, work-boxes, toilet-cases, or any kind of furniture—with metal plates which are sunk into the article so as to afford a neat durable finish, and which at the same time can be cheaply made.

It has been customary in the class to which this pertains to prepare strips, sheets, or plates of metal of suitable size, shape, and design, then finish the exposed face and embed the same in the wood or other material at the desired places. For plain or regularly-formed surfaces the work in this way could be readily performed; but when it is desired to ornament irregular shapes or rough surfaces, or when irregularly-shaped strips are to be twined around canes and other like articles it is exceedingly difficult, if not impossible, to do the work. My invention enables this to be done very easily and in a more efficient way than by the present style of applying the plates to the surface.

My invention consists in preparing a depression, by engraving or otherwise, in the article to be ornamented, of the shape and style that the ornamentation is to be. This depression or channeling may be of any suitable depth, and when it is necessary the side walls are undercut to hold the metal. When this is done, the depressed or cut-out portions are filled with metal by the well-known process of electro-deposition until the metal is higher than the surface of the surrounding

wood. The metal is then ground down flush with the wooden surface and polished. This being done, the surface of the wood between the metal plates is covered with gum, wax, varnish, or other non-conducting material, and the exposed metal surface is subjected to the electro process for the purpose of plating the same, all of which will now be set forth in detail.

In preparing the article for ornamentation I form it into the desired shape and either finish the wooden or ivory portion by suitably engraving or carving the figures thereon before subjecting it to my process or after the metal is deposited and electroplated. In either case I channel out the figure that it is designed to ornament with the metal—as shown, for instance, in Fig. 3 at A. This may be of any suitable depth, and in order to provide a means for holding the metal in without resorting to the use of nails I undercut the side walls, as shown more clearly at B, Fig. 4. It is not absolutely necessary that the entire walls should be undercut, but only at such points as are essential to hold in the metal. This represents the first stage of the process. The channeled portions are then treated with plumbago, iron filings, or other means such as are employed to give the depressed surface conducting qualities, in order that the metal can be deposited therein by the electro process. When sufficient metal has been deposited so that the channels are filled and the metal exposed above the surface of the wood or other material, the article is ready for the third stage of the process. This consists in grinding down the metal to a finish flush with the wood or ivory and engraving the metal, if so desired, and in then coating the entire wooden or ivory surface of the article with varnish or other non-conducting material, leaving the metal portions exposed. The fourth step in the process consists in submitting the article to the electroplating-bath, so as to cover the exposed metal with the desired finish, after which the varnish is removed.

Instead of undercutting the walls, suitable notches C, as shown in Fig. 2, may be employed to hold the metal on; but in either case the deposited metal will enter the undercut or the notches, and thus hold the

metal in place, which is far preferable to the method in inlaying the metal and then holding it in place by means of screws or nails.

In Fig. 1 I show at D the finished metal ornamentations, as hereinbefore described.

What I claim as new is—

The herein-described process of ornamenting wooden or non-metallic substances, which consists in first channeling the design in the surface and undercutting the walls; second, filling said channels by electro-deposition of metal therein; third, grinding down said metal to the surface of the wood and engraving designs thereon or finishing the same, and,

fourth, stopping out the wooden portions between the metal plate with non-conducting substance and electroplating the exposed metal portions, substantially as herein set forth.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 27th day of June, 1890.

MYER HECHT.

Witnesses:

RESOLVERT N. GOODRICH,
AUGUSTUS R. BIRD.