### P. ORAMAS.

# PROCESS OF JAPANNING METAL SURFACES. APPLICATION FILED JULY 16, 1908.

906,916.

Patented Dec. 15, 1908.

Fig:1.

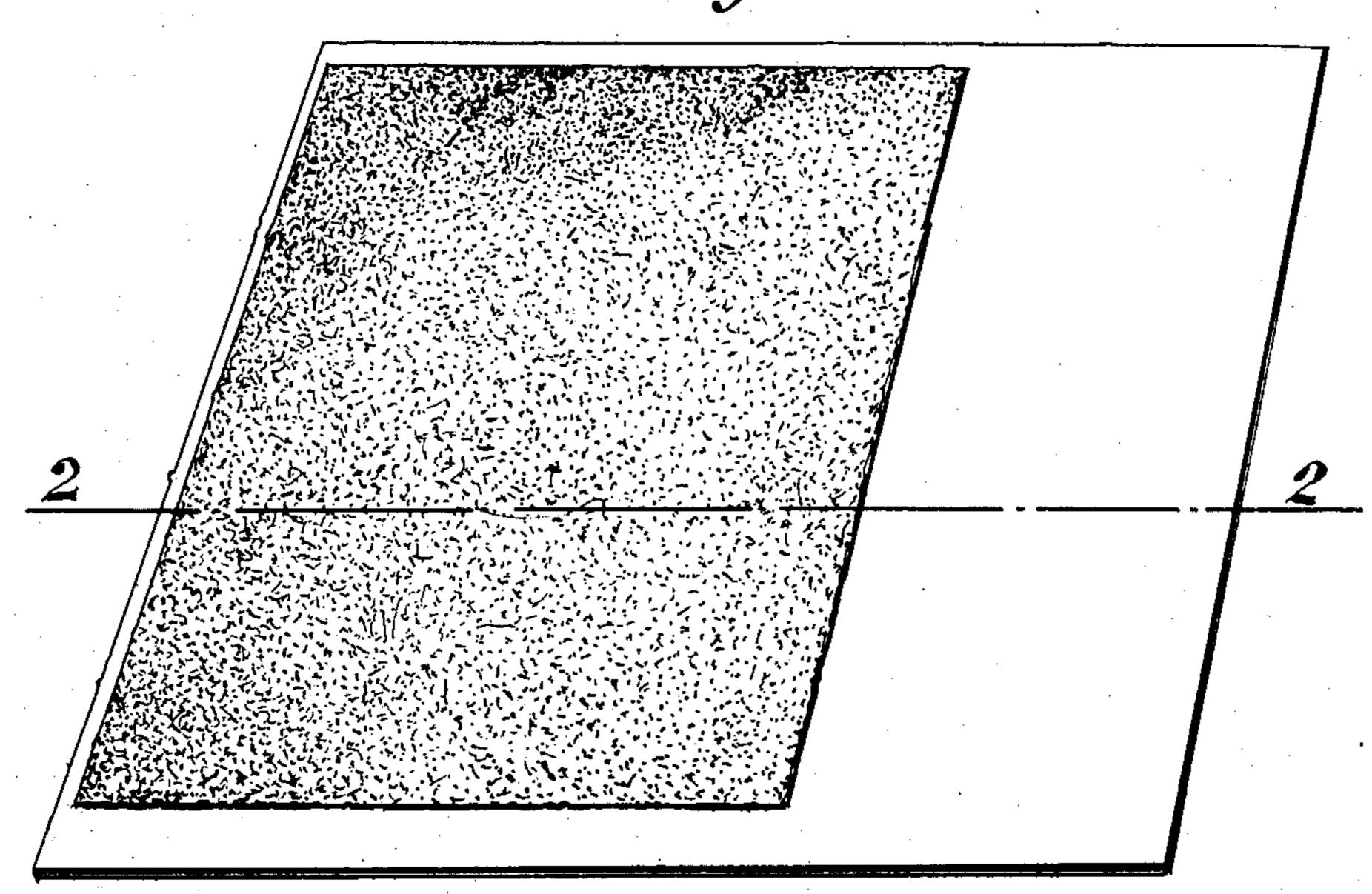


Fig: 2

Ditnesses: Fannie Fish H. Suhrhier. Tatricio Tramas By his Ottorneyse, Sull Koulle

## UNITED STATES PATENT OFFICE.

PATRICIO ORAMAS, OF NEW YORK, N. Y., ASSIGNOR OF ONE-HALF TO OSCAR LOOS AND ONE-HALF TO GEORGE STAHL, BOTH OF NEW YORK, N. Y.

#### PROCESS OF JAPANNING METAL SURFACES.

No. 906,916.

Specification of Letters Patent.

Patented Dec. 15, 1908.

Application filed July 16, 1908. Serial No. 443,783.

To all whom it may concern:

Be it known that I, Patricio Oramas, a citizen of the Kingdom of Spain, residing in New York, in the borough of Brooklyn, 5 county of Kings, and State of New York, have invented certain new and useful Improvements in Processes of Japanning Metal Surfaces, of which the following is a speci-

fication.

This invention relates to an improved process of japanning metal surfaces in imitation of leather so that a tenacious and durable coating in different colors is obtained, to be used for lamp-fonts, opera-glasses 15 and metallic articles of all kinds, where heretofore leather-coverings were used; and for this purpose the invention consists of a process of japanning metal in imitation of leather by coating the carefully cleaned sur-

20 faces with black or other colored varnish, then screening a layer of bran over the varnish coating, then subjecting the thus coated surfaces in a japanning furnace to a temperature increasing gradually from 50° C. 25 to 150° C., next polishing the japanned sur-

faces for removing the carbonized bran, and

lastly polishing the surfaces.

In the accompanying drawing, Figure 1 represents a perspective view of a metal 30 plate provided with a coating in imitation of leather made according to my improved process, and Fig. 2 is a vertical longitudinal

section on line 2, 2, Fig. 1.

In carrying out my improved process of 35 japanning metal articles, the surfaces of the same are first carefully cleaned with benzene or other suitable liquid hydrocarbon and then coated with a varnish of black, dark green or other suitable color. A layer of bran is 40 next screened over the surface while it is still moist, and the article then placed in a gas-heated japanning furnace for hardening the coated surface and carbonizing the bran so that the varnish-and-bran coated surface 45 assumes a porous character or grain in imitation of the pores of leather-goods. The heating to which the so-coated articles are subjected in the furnace has to be gradually increased from a temperature of about 50° C. 50 to 150° C. for about two hours. The articles

are then removed from the furnace and are

carefully polished for removing the superfluous particles of carbonized bran. If necessary, another coat of the same colored varnish is placed over the grained surface and 55 again subjected to hardening in the furnace to a temperature of from 50° to 150° C. for another two hours, after which the surface is again carefully polished for removing the carbonized bran. Sometimes a third coat- 60 ing is given whenever a thick coating of japan is required. The result is a surface which is a close imitation of leather and which adheres tenaciously and permanently to the surface of the metal and impart to 65 it a hardened, non-removable coating in imitation of leather. The process is applicable to brass and other metallic surfaces, and can be used in all cases where heretofore a leathercovering was employed.

Having thus described my invention, I claim as new and desire to secure by Letters

Patent:

1. The process herein described of japanning metallic articles in imitation of leather, 75 which comprises the following successive steps, first coating the cleaned surface of the articles with a black or other colored varnish, screening a layer of bran over the varnished surface, subjecting it to a tem- 80 perature increasing gradually from 50° C. to 150° C., and lastly polishing the same.

2. The process herein described of japanning metallic articles in imitation of leather, which comprises the following successive 85 steps, first coating the cleaned surface of the articles with a black or other colored varnish, screening a layer of bran over the varnished surface, subjecting it to a temperature increasing gradually from 50° C. 90 to 150° C., and lastly polishing the same and then repeating the foregoing steps until a coating of the required thickness is obtained.

In testimony, that I claim the foregoing 95 as my invention, I have signed my name in presence of two subscribing witnesses.

## PATRICIO ORAMAS.

Witnesses:

PAUL GOEPEL, HENRY J. SUHRBIER.