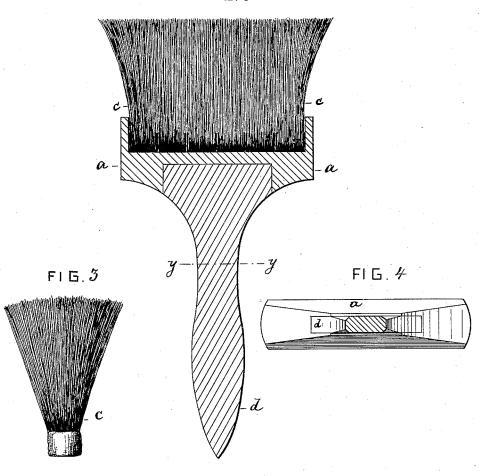
## P. WAGNER.

BRUSH.

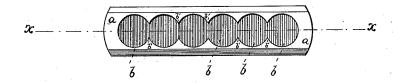
No. 383,506.

Patented May 29, 1888.

FI G. /



F16.2



wing fowe.

Afred Joughmans.

INVENTOR.

I Wagner by his attorneys.

## UNITED STATES PATENT OFFICE.

PHILIP WAGNER, OF NEW YORK, N. Y.

## BRUSH.

SPECIFICATION forming part of Letters Patent No. 383,506, dated May 29, 1888.

Application filed September 22, 1887. Serial No. 250,375. (No model.)

To all whom it may concern:

Beit known that I, PHILIP WAGNER, of New York city, New York, have invented a new and Improved Brush, of which the following 5 is a specification.

This invention relates to a brush more particularly designed for use by lithographers, though it may be put to other uses.

The brush is constructed with a view to withto stand the action of acids and to present a uniform or uninterrupted row of bristles.

The invention consists in the various features of improvement more fully pointed out in the claim.

In the accompanying drawings, Figure 1 is a vertical central section of my improved brush on the line x x, Fig. 2. Fig. 2 is a plan view of the same with the bristles removed. Fig. 3 is a detail view of one of the tufts; and 20 Fig. 4 is a section on line y y, Fig. 1.

The letter a represents the stock or head of a brush carrying the bristles. This head is provided at its forward end with a number of sockets or holes, b, extending from such forward end to an equal distance into the head.

25 ward end to an equal distance into the head. The sockets are of circular shape in cross-section, but are of such size and are placed so near together that each socket opens into the

adjoining socket or sockets, as plainly shown in Fig. 2. Thus one large socket is formed, in 30 which each long side is composed of a series of short curves, forming the projections b'.

The tufts c, properly bound, are introduced into the several sockets, and are secured in place by pitch. In this way the several tufts, 35 though securely held, will be blended together above the edge of the head a, and thus a uniform body of bristles and a uniform working-surface will be formed.

The back of the head a is provided with a 40 socket, into which there is set the end of the handle a. The head and handle are preferably made of wood, and they are made in separate pieces, so that the grain may run lengthwise in the head as well as in the handle. The 45 head should be steeped into asphaltum to better withstand the action of acids.

What I claim is—

As a new article of manufacture, a brush having a series of sockets opening into one another, in combination with tufts set into said sockets, substantially as specified.

PHILIP WAGNER.

Witnesses:

F. v. Briesen, William Partington.