

November 5, 1913.

DRAWING

1,884

A careful search has been made this day for the original drawing or a photolithographic copy of the same, for the purpose of reproducing the said drawing to form a part of this book, but at this time nothing can be found from which a reproduction can be made.

Finis D. Morris,

Chief of Division E.

AWK

UNITED STATES PATENT OFFICE.

DANIEL HARRINGTON, OF PHILADELPHIA, PENNSYLVANIA.

MANUFACTURE OF ARTIFICIAL TEETH.

Specification of Letters Patent No. 1,884, dated December 10, 1840.

To all whom it may concern:

Be it known that I, DANIEL HARRINGTON, of the city of Philadelphia and State of Pennsylvania, have invented a new and improved mode of strengthening the connection between porcelain or mineral teeth and the rivets by which they are usually attached to metal in bars, plates, springs, &c., and thence adapted to the human mouth; and I do hereby declare that the following is a full and exact description.

The nature of my invention and improvement consists in combining with mineral, or porcelain teeth (as well as other articles made from earthy or mineral substances) platina rivets made with pressed up heads, like the heads of common wood screws, their heads being either semicircular, or flat, upon either the upper, or under side, or both, leaving out the slot, or groove, common to such screw heads, but more perfectly like the pressed up heads of the solid head-brass-pins now in common use for pinning wearing apparel (one of these pinheads with one sixth of an inch of its shank attached to it and made of wire the twenty fourth part of an inch in diameter, would exactly represent my rivet for common sized teeth,) see accompanying specimens and drawings, Figs. *a*, *b*, *bb*, *c* and *cc*, &c. These rivets in their combination have thin head ends inserted into the teeth (and their shank, or small ends left out) while the teeth are forming from the mineral ingredients in their soft state and are then burned in while the composition is becoming porcelain teeth, or solid, by the burning process, in a manner similar to that by which manufacturers of such teeth, in general, in the United States, have for years past, inserted platina rivets of other forms into their teeth.

One advantage arising from my improvement consists in giving a great increase of strength to the attachment between the rivets and the teeth, and of consequence, a similar increase of strength between the teeth and the metallic bars &c., by which they are adapted to the human mouth, because of their pressed-up-uniform-heads, burned in &c., and being the best possible form that can be adapted to the

purpose. Another advantage arising from this form of rivet, is, that it will endure the force of the riveting hammer when forming a head on the outer end with far less liability to fracture the tooth, and this because of the prevention form of head embedded in the body of the tooth &c. than the usual flat end, or spiral form platina rivet, which, from its spiral form, is not only more liable to fracture the tooth under the force of the riveting hammer, but can be drawn out with much less force, of consequence, cannot embrace the same degree of strength. These pin head rivets can be made by the common (wood) screw, pin making, or brass, wire, tack (with pin head) making-machines, now in extensive use in the United States, dispensing with the pointing parts of said machines, and the teeth can be made in the ordinary way, or as dentists in general manufacture them, the apparatus being of proper sizes.

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

1. The exclusive privilege of making and applying to, or combining with mineral, or porcelain teeth, and other articles made from earthy or mineral substances by burning, the above described screw-head, or pinhead-form of rivets, pressed up by mechanical force, or weight, as to their head ends, and cut off square, or at a perfect right angle, at their small ends, and, of course, the exclusive privilege of vending said articles in the United States of America:—that is, mineral, or porcelain teeth &c. having my pin-form head-rivets.

2. I also make and combine with porcelain, or mineral teeth (being my invention and improvement) staple form rivets of platina, the curved, or connected end of the staples being burned in as above described of the pin-head-form rivets. These platina staples can be made by the aid of common pliers;—but I give the preference to the rivets first described above;—yet I claim this latter invention and improvement.

DANIEL HARRINGTON.

Witnesses:

JOHN BINNS,
WM. PATTEN.