

(No Model.)

E. T. STARR.
SAMPLE TEETH HOLDER.

No. 537,553.

Patented Apr. 16, 1895.

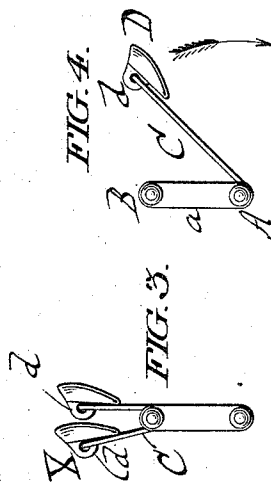
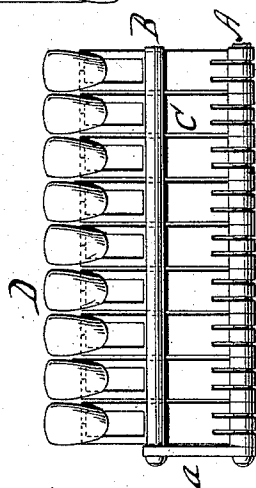
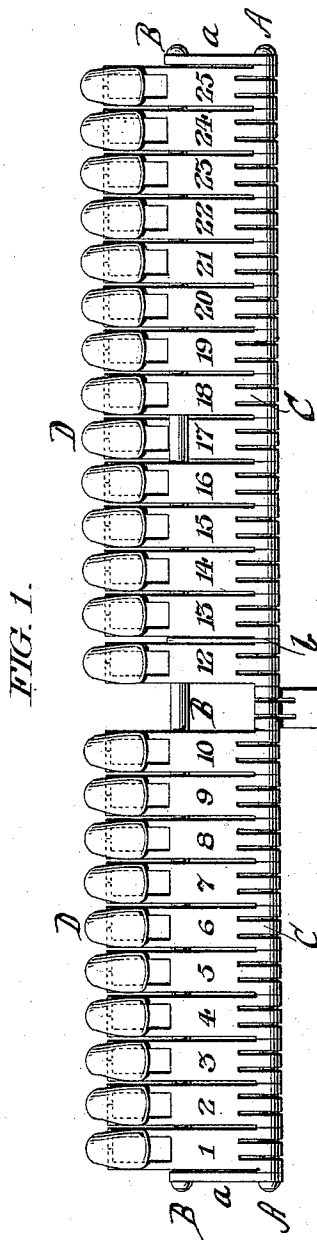
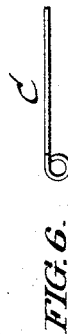
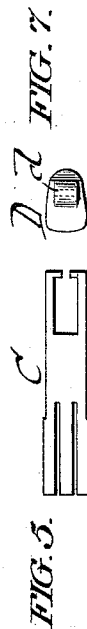
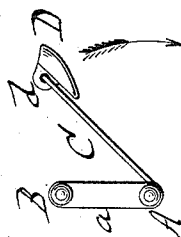


FIG. 4.



WITNESSES:

Geo. S. Morgan
Edw. J. Simpson Jr.

INVENTOR

E. T. Starr
By Atty. J. H. Payne

UNITED STATES PATENT OFFICE.

ELI T. STARR, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO THE S. S. WHITE DENTAL MANUFACTURING COMPANY, OF SAME PLACE.

SAMPLE-TEETH HOLDER.

SPECIFICATION forming part of Letters Patent No. 537,553, dated April 16, 1895.

Application filed February 11, 1895. Serial No. 538,021. (No model.)

To all whom it may concern:

Be it known that I, ELI T. STARR, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Sample-Teeth Holders; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to certain improvements, as hereinafter claimed, in holders for sample artificial teeth, and my objects are to enable dentists to readily contrast or compare artificial teeth of varying shades with natural teeth in the mouths of patients, and facilitate the selection of artificial teeth to match the natural teeth adjacent to which they are to be located by means of artificial dentures, pivots or bridge-work.

In the accompanying drawings, Figure 1 is a view showing my improved device as adapted for use in matching upper front teeth, and Fig. 2 a view of a portion of the device as used for matching lower front teeth. Fig. 3 is an end view showing different adjustments of the teeth carriers; Fig. 4, an end view showing one tooth carrier as being rocked about its pivot. Figs. 5 and 6 show plan and edge views of one of the teeth carriers, and Fig. 7 a back view of one of the teeth.

A suitable holder frame is shown as composed of parallel rods A B rigidly connected by end cross bars *a a* and a central cross bar *b*. Teeth carriers C of suitable number, and best made of thin sheet metal, are pivoted to rock or swing upon the lower frame bar A. As shown, each carrier has two slits or cuts extending part way its length from its inner end to form three arms or members which are bent to provide the pivoting bearings by which the carriers are connected with their pivoting rod A. Twenty-five carriers are shown, numbered from 1 to 25 inclusive, and each carrier has an artificial tooth D attached to its outer end. These teeth, to adapt them for connection with their carriers, are each formed with a perforated back lug *d* by means of which they are pivotally connected with the carriers, as plainly shown and as repre-

sented in United States Letters Patent No. 362,803, dated May 10, 1887. The teeth differ in shade or color one from another, the shades varying, as well known in the art, in order that the natural teeth may be nicely matched by artificial ones. The tooth attached to any carrier is the counterpart in shade to teeth numbered to correspond with the carrier number. Such teeth are kept in stock by dealers, and many dentists keep a supply on hand.

As the carriers are independently pivoted to the frame any one or more of them may be swung as desired out of alignment with the others which are left undisturbed, as will be seen by reference to the drawings. There is sufficient frictional contact between the carriers and their pivoting rod to hold them in any position to which they may be adjusted.

Frictional contact between each carrier and its pivoting rod is readily attained by suitably compressing or closely fitting the central portion of the respective pivoting bearings of the carriers about the pivoting rod, so that the carriers are yieldingly clamped upon the rod.

It will be seen that the carriers are adapted to rock about an axis (the pivoting rod A) parallel to the axes of oscillation of the teeth in the carriers, and that the teeth are arranged in line, with their front or labial surfaces fully exposed and parallel, or nearly so, both to the axis about which the carriers rock and the axis about which the teeth rock in their carriers.

In operation, supposing one or more upper teeth to be needed for the mouth of a patient, the holder, with the carriers adjusted as in Fig. 1, is held close to the patient's mouth with the sample teeth opposite the remaining upper front teeth of the patient, and then by moving the holder along to contrast the different sample teeth with the natural teeth the proper shade may quickly be determined and the number of the carrier of the sample tooth representing this shade noted; or the dentist instead of stopping to make a note of the number at the time may rock the carrier of the selected sample tooth out of alignment with the other carriers, to designate the selected sample, and the holder may then be laid aside for subsequent reference, the frictional piv-

otal connection of the adjusted carrier with
its pivoting rod maintaining it in its position
of adjustment out of alignment with the other
carriers. The dentist has now only to select
5 for use the tooth or teeth needed designated
by the number of the carrier of the chosen
sample tooth. Should there be difficulty ex-
perienced in matching the natural teeth the
carriers of two or more sample teeth thought
10 to most nearly match the natural teeth may
be rocked about their pivotal connection with
the frame, and the samples thus designated
then separately compared with the natural
teeth and the best match selected.
15 For matching lower front teeth in the mouth
the device is used as will be understood by
reference to Fig. 2, the number of the carrier
of the selected sample being noted, at the
time, or the carrier rocked out of alignment
20 with the others, as before explained.

The device may, if preferred, be used with
the carriers adjusted as indicated at X, Fig. 3.
I claim as my invention—

1. The combination, in a holder for sample
teeth, of the pivoting rod, the carriers having 25
frictional pivotal connection therewith and
adapted to be swung independently and to
be maintained in their position of adjustment,
and the teeth attached in line to the carriers
with their front or labial surfaces exposed 30
and parallel or nearly so to the pivoting rod,
substantially as set forth.

2. The combination, in a holder for sample
teeth, of the frame, the carriers pivotally con- 35
nected therewith and adapted to be swung
independently, and the teeth pivoted to the
carriers, having their front or labial surfaces
fully exposed, and adapted each to rock about
an axis parallel to that about which the car-
riers swing, substantially as set forth. 40

In testimony whereof I affix my signature
in presence of two witnesses.

ELI T. STARR.

Witnesses:

GEO. P. MORGAN,

EDW. F. SIMPSON, Jr.