

RAW COTTON.—Large end of tubes not sealed: Twenty-two tubes were as well packed as possible with dry, raw cotton, using fine strong instruments for the purpose. The ends of these tubes were placed in the solution for twenty-four hours. In twenty tubes out of the twenty-two the cotton was markedly colored. At the end of forty-eight hours the cotton in all the tubes was colored red.

ABSORBENT COTTON.—Large end of tubes not sealed: Seven tubes were filled with dry absorbent cotton in the same manner as those previously mentioned, and placed in the same solution for twenty-four hours, and in every case the solution colored the cotton.

ABSORBENT COTTON.—Large end of tubes sealed. It was said that if these tubes had their large ends sealed, as a tooth is sealed with a filling, that the cotton would not absorb moisture. To show the fallacy of this argument, twenty-six tubes were filled with absorbent cotton, as before described. The large ends of the tubes were sealed in the following manner: Cement, 2; Sealing wax, 4; Wax, 13; Glass, 7. Out of twenty-six tubes put in, twenty-four were colored at the end of twenty-four hours, thus showing that the sealing of the large end of the tube had but little if any effect on the absorbability of the material in the canal. There were two tubes sealed with the wax that were not colored.

ONYPHOSPHATE CEMENT (As 1).—Twelve tubes, filled in the ordinary manner, and placed in solution for seventy-two hours. Four were colored in patches all the way up the canal; eight were colored a very slight distance at the end.

A lump of the same cement about the size of a bean was placed in the solution for seventy-two hours, at the end of which time the red color could not be washed from its surface, but yet there did not seem to be any considerable permeation of the mass. On further examination of the cement removed from the tubes, it was found that the color did not permeate the cement. In those cases where the color appeared high up in the tube, it was evident that the tube was imperfectly filled, and allowed the solution to pass up the sides. There did not appear to be any contraction of the cement, as was shown by the microscope and by the difficulty with which a mass was forced from a cylinder.

HAMMOND'S CEMENT.—Thirteen tubes were filled with this Cement, all of which were colored at the end of forty-eight hours. At the same time a mass about the size of a hazel nut was placed in the solution, and on examination at the end of forty-eight