## Concerning Various Methods Advocated for Obviating the Necessity of Extracting Devitalized Tooth-pulps.

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The practice now in vogue among good practitioners, of thoroughly removing the pulp and filling the root-canal to the apex, is usually so easily carried out in the incisors and cuspids, and gives such sure results, that there is no probability that a better method will ever be found. But when we extend this treatment to the bicuspids and molars, the labor and expense entailed are frequently so great as to put it beyond the reach of the great majority of the human race, and the method is not always successful. It will consequently be a great boon if some means or method can be devised which would render unnecessary the removing of the pulp and filling the root-canals of molars.

While every dentist has now and then knowingly left remains of the pulp in narrow and tortuous canals, or in canals obstructed by calcific matter, and while many dentists in Europe have contented themselves with simply devitalizing the pulp, filling over it with amalgam and *leaving the rest to nature*, the first *systematic* attempt to do away entirely with the necessity of extracting the root-portions of the pulp appears to have been made by Witzel, who, in 1874, presented the view that an application of arsenious acid carefully made to the inflamed pulp devitalized only the disease tissue, and that by amputating the coronal portion of the pulp twenty-four hours after the application, the ends of the root-stumps might be treated as healthy, freshly-exposed pulps.

Dr. Miller then presented briefly the methods devised by Witzel, Baume and Herbst, the latter as put forth by its author and as modified by Bodecker, and summarized their advantages and disadvantages. Continuing, he said :

Perhaps the majority of dentists have also made more or less extensive use of the method recommended by Bodecker, when they have left a portion or the whole of the pulp in the buccal roots of upper, or mesial root of lower molars, and filled directly over them, after thoroughly bathing them with carbolic acid or some other antiseptic.

I have for a long time felt that the solution of the problem was to be sought for in the direction pointed out by Witzel, except that our efforts should be directed, not to retaining the vitality of the root stumps, but to preventing their subsequent decomposition by impregnating them with a suitable antiseptic. I am convinced that the success of the impregnation method depends, to a very