

them stiff at the time we finish our filling. We can make this annealed amalgam so that it will work soft or hard as we please, but after we have annealed and produced the condition of non-expansion we can make the working property very soft if we choose. If we have control of shrinkage and expansion we can control the working property. We can make amalgams containing seventy-four parts of silver work very soft and be a long time in setting, but it would defeat us to do that. We must have our amalgam work stiff, gentlemen, or we cannot make good fillings. (Applause.)

The PRESIDENT—I would like at this juncture to introduce to you a gentleman that has come with Dr. Black from Chicago, in a certain sense as his assistant—Dr. Noyes of the Northwestern University of Chicago, the Dental Department, and I take great pleasure in extending to Dr. Noyes the courtesy of the floor and have him say something to us.

Dr. NOYES—I thank you very sincerely for this courtesy, which I appreciate very much indeed, and am very glad to have a chance to say just a word in regard to these amalgams, which I think may be of interest to you. Very shortly before we left Chicago we had in that city the tenth anniversary of the Odontographic Society for the Clinic of which I was asked to give an exhibition of some of the amalgams on the market, and I think perhaps you would be interested in hearing the report to that Clinic. Before I do I want to say just one word in regard to this little instrument, although the Doctor is present. In the preparation of that Clinic there were forty-five fillings made, and each one of these fillings was measured from five to fifteen times. A great many of them produced a movement which was accomplished in about two days. The work of the preparation of these fillings was stretched over ten days, and on each day, two or three times a day, all the fillings that had been made were measured. I wish to say that that instrument acted in a way which seemed to me to be truly remarkable, although I have had some experience with physical instruments for measurement. We found that after the filling had completed its movement it could be measured ten times, one time by myself, the next by Dr. Black, and so on indifferently, Dr. Black or myself making the measurements, and record exactly the same reading.

Dr. NOYES then read from report to the Odontographic Society, entitled, "A Series of Tests of Amalgams as to Shrinkage and Expansion."

The first point which Dr. Black developed was the annealing property of alloys, briefly stated as follows: The cutting of the alloy changes the action of the filings towards mercury so that they require more mercury to amalgamate them and in setting the