of sodium may be given internally, in doses of a scruple three times a day, and also used as a mouth-wash. The same dose (1 scruple) may be given of the sulpho-carbolate of sodium, and, dissolved in an ounce of water, used as a gargle. These medicines undoubtedly have an alterative effect, as well as a local action (see Braithwaite, Part 63, page 24.)

The tincture of smartweed (Polygonum punctatum) in drachm doses, diluted with water, to be taken internally, and used as a gargle, is highly recommended by a writer in the Philadelphia Med. and Surg. Reporter. Another authority regards bismuth, in ten-grain doses, as a certain remedy.

In several obstinate cases I have used the following formula with good results. (The formula is borrowed from the Reporter.) In one case cure followed in less than a week, but during its use the baby, previously well, was severely griped and purged. I think that it should be used with much caution, and discontinued in a few days if it does not seem to do good, or if it affects the baby injuriously. The dose of the biniodide is about one thirtieth of a grain:

R. Hydrarg. biniod, gr. v. Pot. iod. gr. x. Aquæ 3 j.

M. Ft. sol. liq.

Take three to five drops, after meals. For a mouth-wash, add six drops to a tablespoonful of water.

This remedy, besides its local stimulant and resolvent action, undoubtedly does good as an alterative, improving local and general nutrition.—Med. Record.

## ARTICLE XI.

Investigations on the Local Effects of the so-called Astringents upon the Blood Vessels.

Dr. A. Rosenstein, (Wuerzburg, Phys. Med. Verhdlg., 1876,) examined the effects of solutions of argentum nitricum, plumbi acetas, acidum tannicum, gallicum and pyrogallicum, ferrum sesquichloratum and alumen, by applying

them to the mesentery of curarized frogs, and measuring the calibre of the affected vessels with the micrometer. The most powerful contraction was produced by nitrate of silver in a solution of one to ten per cent., the observations being often disturbed by the ensuing partial opacity of the tissues. The contraction in many cases involved one-half of the lumen, both of the arteries and veins, being less marked in the capillaries, and manifesting itself in the course of a few seconds. R. observed a stoppage of the circulation in the affected vessels, which, was permanent in the capillaries, but at times only transitory in the arteries and veins. Tannic acid, contrary to expectations, was found to have the opposite effect, dilating arteries, veins and capillaries, as much as one-half of their calibre, while they became at the same time choked with blood corpuscles. The dilated vessels immediately contracted on the application of nitrate of silver. Gallic and pyrogallic acids were found to have the same effect as tannic acid. Acetate of lead produced a contraction of the arteries and veins, though less markedly than nitrate of silver. Its effect could not be traced to the capillaries. Occasionally, a stoppage of the circulation was observed. The vessels almost invariably contained white coagula, consisting of conglomerated, colorless blood corpuscles, often adhering to the walls of the vessels, and thus giving to their transverse sections a beaded appearance. A ten per cent. solution of liquor ferri sesquichlorati had no perceptible effect. A fifty per cent. solution caused a contraction of the vessels, though in a still lower degree than acetate of lead. This contraction was limited to the arteries and veins, while the capillaries remained dilated. A frequent result was coagulation and discoloration of the blood within the vessels. A discrepancy was observed in the results of the various experiments with alum solution. The vessels were in some cases contracted, in others dilated; while in others again, no appreciable change was noticed. In the capillaries, especially the smaller ones, the circulation often ceased. In order to prevent reflex

action, he extirpated the spinal column of the frog, and destroyed the communication between the vessels and the heart, without changing in any way the local effect of the substances above mentioned. From the results of these experiments the author infers that only nitrate of silver and acetate of lead can be said to exert an astringent action, i. e., to cause contraction of the tissues, this effect being of uncertain occurrence in alum, and the liq. ferri sesquichlor., and entirely absent in the tannic group.—Toledo Med. and Surg. Journal

## EDITORIAL, ETC.

[The following circular has been recently issued. The profession is familiar with the hard fight made against this monopoly in the past, and familiar also with the results. The new evidence here presented is certainly strong corroboration of the conviction which all fair-minded men have held from the start, that the Goodyear Dental Vulcanite Company had no just right to the royalty they collected. The importance of the matter to the profession is seen in the strenuous efforts of those who are working up this new case, and the previous failures made may in this case show the way to success, and if it can be done, it is the duty of the Dentists to shake off this oppression. The fact cited in the circular respecting the use the Rubber Company intend making of the Hæring patent should stimulate endeavor to break their case. We trust that entire success will attend this latest effort.—Ed. Amer. Jour. Dental Science.]