where they were shown a number of interesting cases by the staff, by whom they were also entertaiued to a champagne luncheon.

The meeting closed with a hearty vote of thanks to the President, Dr. Roddick, for his patient service.

On Thursday evening theAssociation was entertained to a banquet in the Windsor Hotel, which was most successful in every way.

The Association meets next year in Ottawa, after which it is probable Montreal will be chosen as a permanent place of meeting.

## Progress of Science.

### THE REAL AND RELATIVE VALUE OF OUR RECENT ANTIPYRETICS.

By J. C. Johnson, M. D., Atlanta, Ga., Lecturer on Diseases of Children, Atlanta Medical College.

Perhaps in no era of medicine, since it has attained the dignity of a science, have so many rival remedies sought recognition in materia medica as are now clamoring for use. Scarcely have the merits of one been adjudged, and its place in therapeutics assigned, before its successor, boasting superior virtues, is announced and accepted, only to meet a similar fate. Thus the list of remedies lengthens, but to prove the narrow range of application and uncertainty of them all, reflecting discredit upon this branch of medicine, and inviting the introduction into popular practice of numberless proprietary preparations and patent nostrums whose only benefit is the tax they pay.

There is a measure of responsibility inseparable from our support of corporations whose high office is to prescribe in certain forms and combinations certain drugs for our profession to dispense. Progress in therapeutics is attained by individual observation and research, and not by the general and ready acceptance of advertised opinions.

Our object is to mitigate suffering and cure disease, and it were criminal folly to reject a remedy, of established efficacy, simply because we did not know its method of operation. Digitalis should be employed in valvular diseases of the heart, had experience only proved that it accomplishes the end desired, but its greater usefulness rests in the fact that it does so by lengthening diastolic and strengthening systolic action.

It is not my purpose to decry the worthy attempts of pharmacists, nor repel the advent of any agent which promises greater efficacy or exactness in therapeutics. With increasing and important developments in the various fields of pathology, we need equal advance in therapeutics, and we can never determine the merits of the new while we exclusively employ the old; but when on uncertain seas, let us not forget our unvarying compass, lest while steering from Scylla we are engulfed by Charybdis.

In composing this paper, my chief purpose was to place before the society for discussion some of our most recent remedies. My knowledge of and experience with them are too limited to encourage the hope of enlightening you upon their merits or modes of action. But for our own mutual good, and especially for my own gratification, I would evoke expressions from the members, to determine and agree upon their utility and indications for employment, in the light of our present knowledge concerning them.

I refer to antipyrin, phenacetin, antifebrin and acetanilid. We all know that the last two are one and the same, antifebrin being the trade name for the compound more properly called acetanilid. Antipyrin was discovered in 1884, by Dr. Ludwig Knorr, of the University of Wurzburg, Bavaria, in an attempt to make quinine synthetically.

Antifebrin was prepared as a chemical by Gerhardt, in Germany, in 1852, but its use as a medicinal agent is of comparatively recent date.

Phenacetin, the last addition to this number, has been in use a shorter period than either of the others, though it has quickly won its way as their successful rival.

Chemically speaking, all these are of the coal tar series, are unstable, and cannot be given with acids or acid salts. Strong alkalies decompose them. Neutral salts are compatible with them. Phenacetin is the most stable of them all, and can be combined with a larger number of chemicals than the others. It is not decomposed by dilute nitric or hydrochloric acid. It is also the least soluble of them all. Antipyrin is easily soluble in less its weight in water, and I most frequently prescribe it with syrup of tolu. Antifebrin, or acetanilid, is less soluble than antipyrin, but can be conveniently mixed with whiskey. Either of these three can now be had in the form of tablets.

It is with the therapeutical action of these drugs that we are chiefly concerned. Their first claim was as antipyretics, but later observation proved also their ability to relieve pain. These two effects are generally conceded them now. I do not know that any curative power in any disease has been accorded them or, if so, that it has been established. It would greatly aid us in our considerations, and enhance the interest of the paper to quote some popular opinions touching upon the pathology of fever, that we