this statistical study fall into two groups. In one we seek for variations in the amount, duration, &c. of stimulation, due to causes which are well known to influence the course of the disease; while in the other we proceed in the opposite direction, and seek to explain certain variations by discovering influences sufficient to account for them. To the former class belong age and sex; to the latter suckling, pregnancy, &c.; and partly to both classes our inquiring into the relations of the day of fever to stimulation. The common property through which these and all other circumstances are related to stimulation is, in so far as they modify the vital force on the maintenance of which the patient depends for a safe transit along the beaten path of the fever. Alcoholic stimulants are a two-edged sword in the hands of the practitioner. If employed within the range of their stimulant action, which is variable for every case, they are helpful; if pushed beyond, into their narcotic action, they impair the vitality, which it is our aim to augment; even as pure stimulants, they may be used unnecessarily, so as to push and urge the labouring energies of the system to a sudden breakdown, half-way in a journey which might with leisure have been easily accomplished. In any case this definite journey lies before the fever-patient. Whatever the advancement of knowledge may add to the power of the physician, certainly, at its present stage, treatment has no efficiency except as ancillary to the vitality of the patient. The recognition of this as a fact in the natural history of fever seems to me to be the secret of its successful treatment. In the course of this paper, especially of the latter part, I have pointed out many facts, the tendency of which is to prove that there is a determined course and climax in the disease. Individual differences from age, sex, habits, social circumstances, &c., do not obliterate this periodicity, but at most exhibit it in some as death, in others as a crisis; now in a demand for stimulation, marked by intensity, as shown in the numbers requiring it, in the amount required, or in the duration of the requirement; there being always some shock to indicate the arrival at, if not the passage over, a period of natural and inevitable trial to the vitality. The action of the physician is thus limited purely to intelligent and minute observation; to the employment of every means to relieve the constitution of all *impedimenta*, and equip it for a journey which must be traversed; to the acquisition of an intimate acquaintance with every inch of the road, and to the judicious use of such means as are at his disposal to sustain the vitality of the individual until all the dangers are past. There is a certain perennial element of truth in this position. It is external to the system that we must look for the greatest prospective triumphs of medicine over zymotic disease. Prevention will always be better than cure. What Lister seems to have accomplished in surgery is the perfection of our hopes in medicine. The poison of typhus has as definite an existence as that of the rattlesnake, or as arsenic. We may be able some day to isolate it, as well as them. If we have in carbolic acid or sulphurous acid an agent which will neutralize and destroy specific poisons, it still remains true that outside the body the work must be done, to be done effectually. The immediate result of their introduction into the system is to set agoing a process of perverted nutrition. The administration of the sulphites, for example, may even destroy the active poison, and stop this process; but, for the completion of the work of cure, we must still fall back upon the vitality of the system, and trust to the activity of its functions for the elimination of the morbid products. We may even, therefore, hold it impossible that any advance in the science of medicine can unseat this as the first principle in our treatment of specific disease—the support of the vital energies in this natural tendency through disease to health.”

26. *Treatment of Zymotic Diseases by the Administration of Sulphites.*—Prof. POLLI, of Milan, read before the medical section of the British Medical Association an interesting paper on this subject. He recommends for internal administration, in a *curative* point of view, “the sulphite of magnesia, both as containing more sulphurous acid, and also as being pleasanter to take. As a prophylactic, I recommend the hyposulphite of soda, when it does not act too much as a purgative; and, for external use, I advise the sulphites and bisulphites of soda, which are more soluble than the magnesian salts. On trial, these sulphitic preparations will be found of much value in more particulars

than one. The sulphite of magnesia will always be tolerated by the stomach, even in extreme cases of irritation. It never acts as a poison, and therefore an erroneous dose will never be productive of evil—a quality which it alone possesses among those remedies which have any decided value. Its extreme cheapness is another merit; it is, perhaps, the cheapest remedy in the whole materia medica; and, when its real value has been ascertained, its cheapness will still more be appreciated."

Dr. P. does not claim that these salts are a panacea. He says they do not act as "poisons towards the several morbidic ferments which we have supposed to be the cause of the several zymotic diseases. They do not kill the catalytic germs of the organic poisons; but they react on the material components of our own organism, rendering it, by their presence, incapable of being acted on by these catalytic germs. It is, therefore, easily comprehended how extensive and beneficial must be the use of these sulphites, when it is remembered that among zymotic diseases we class the most numerous, the most obscure, and the most fatal of all diseases."—*Brit. Med. Journ.*, Nov. 16, 1867.

27. *Picric Acid in Intermittent Fevers*.—Picric acid is said to be an efficacious remedy in intermittent fevers. Persons affected with such types of fever, upon whom quinine has lost all its beneficial effects by continuous usage of it—and this is the case with some of our soldiers who return from India—are reported to derive benefit from the use of picric acid and picrates, by Dr. Aspland, at the military hospital at Dukinfield. The knowledge of this fact, says Dr. Calvert, may be useful in districts in which exist poor populations, for it affords them a cheap febrifuge; and, moreover, picric acid is not dangerous, as arsenical preparations are; nor does it derange the stomach like quinine.—*British Med. Journ.*, Nov. 2, 1867.

28. *Digitalis in Rheumatic Fever*.—An elaborate and practically valuable paper on the treatment of rheumatic fever by digitalis, has been recently communicated to the Imperial Academy of Medicine at Paris, by Dr. OULMONT, of L'Hôpital Lariboisière. Twenty-four cases of rheumatic fever, and a few cases of pneumonia and typhoid fever, were treated with this substance; but the important therapeutic deductions that are contained in the paper were derived from the first of these diseases only. As much as fifteen grains of the digitalis powder, in the form of infusion, was given in the twenty-four hours, and continued at this rate until emesis was caused, when the quantity was reduced to such doses as could be tolerated by the stomach. Among the conclusions that Dr. Oulmont arrives at are the following: 1. In acute rheumatism, digitalis, when given in the above doses, lowers the pulse by from 10 to 40 beats, in three or four days; 2. The diminution of the pulse-rate is accompanied with a fall in the temperature amounting to several degrees; 3. Digitalis causes a rapid and complete disappearance of the symptoms when the fever is unaccompanied with complication; 4. It appears to prevent those exocardial and endocardial complications that so commonly occur in this disease; 5. No cerebral symptoms occurred in any of the cases; 6. The excretions were unaffected: the abundant perspiration of rheumatic fever was neither increased nor diminished; and the urine was not modified in quantity or quality, digitalis failing to excite diuresis in this as in other febrile affections; 7. Digitalis has no action on the rheumatism proper—it acts only on the fever by lowering the pulse-rate and the temperature.

Dr. Oulmont also discusses the *modus operandi* of digitalis on the circulation and temperature. He believes with Traube and Von Bezold, in opposition to Schiff and others, that the pneumogastric nerves possess the function of cardiac inhibition; and he adheres to the view of digitalis having a stimulating action on these nerves. But as such a cardiac action is insufficient to account for the effect on the temperature, Dr. Oulmont feels inclined to express his concurrence in the opinion of an independent influence by digitalis on the vaso-motor nerves.—*Ed. Med. Journ.*, Nov. 1867, from *Bull. Gén. de Thérap.*, 8me Liv., 1867.

29. *Treatment of Cerebral Congestion and Hallucination by Arsenious Acid*.—Dr. LISLE states that insane persons often present more or less strongly