high temperature by its oxidation, I nevertheless do not contend that lactic acid in excess is the sole cause of rheumatism. Were it so, quinine, salicylic acid, and possibly salicin would be even more generally efficacious than they are, by virtue of their power of checking those chemical changes on which the development of an excess of lactic acid depends. Taking this view of the disease, I cannot concur in the hypothesis that salicin is a specific remedy for acute rheumatism like quinine for ague. In many cases in this hospital, it has proved valuable in lowering the temperature, and apparently cutting short the duration of the disease; but these results would need to be universally true to justify some of the statements made respecting the efficacy of the drug. It has an antipyretic action in other febrile conditions, and also has a strong influence in reducing the pulse frequency. These properties alone make salicin a valuable agent, and go far to explain its value in rheumatic fever. In such a malady, any drug which lowers temperature and reduces the pulse frequency lessens the gravity of the attack and the risk of heart-mischief. The case to which I now call attention shows, however, that these results do not always follow its use; but, on the contrary, that the free use of the drug while reducing the pulse rate may fail either to materially lower the temperature, to prevent heart-mischief, or to shorten the duration of the disease.

The patient was a man, aged 30, who had some years previously suffered from two attacks of rheumatic fever. Eight days before his admission, he had felt *malaise;* and, on the next day, pain and swelling in his knee-joints and ankles had come on. He remained in bed; but, at the end of the week, applied to the hospital, and was admitted. During the seven days he was in bed at home, he had taken little except tea and one egg. On admission, all his larger joints except the hips were affected, tender, and swollen; the pain was very severe. No cardiac or pulmonary complication. The urine was acid, of specific gravity 1030, loaded with urates, and free from albumen. The temperature on the evening of admission was 103 deg. Fahr.; pulse 92; and respirations 30.

I saw him on September 12th, the morning after his admission; as his temperature was high and the symptoms very acute, salicin was prescribed in ten-grain doses every two hours.

The following table shows the results of the treatment by salicin.

Date.	Pulse.	Temperature. Fahrenheit.	Treatment.
Sept. 12	M. 90	102.4	10 grs. of salicin every 2 hours
	E. 88	102.8	
,, 13	M. 72	101.6	
	E. 100	102.6	
,, 14	M. 102	101.6	15 grs. of salicin every 2 hours
	E. 108	103.4	
,, 15	M. 90	102.4	15 grs of salicin every 2 hrs. till 2 P.M.; then 30 grs. every 2 hrs. till 10 P.M.; then no medicine except morphia, gr. ¼ *sub cute*
	E. 90	102	
,, 16	M. 96	102.6	30 grs. of salicin every 2 hours during the day
	E. 96	102	
,, 17	M. 96	103 4	30 grs of salicin at 1 P.M. and 5 P.M.; ¼ gr. morphia *sub cute* at night
	E. 100	102	
,, 18	M. 84	101.4	Salicia, 30 grs. at 1 P.M. and 7 P.M.; morphia *sub cute*
	E. 84	102.2	
,, 19	M. 96	102.4	
	E. 84	102	
,, 20	M. 68	100.4	90 grs. of salicin daily—viz., 30 grs. at 5 A.M., 1 P.M., and 9 P.M.; morphia, ¼ gr. *sub cute* at night
	E. 72	101.6	
,, 21	M. 72	101	
	E. 88	103	
,, 22	M. 72	101	
	E. 84	102	
,, 23	M. 84	101.6	
	E. 72	103	

On September 14th, when the fifteen-grain doses of salicin every two hours were begun, hourly observations of the temperature were carefully made by the resident clinical assistant, Mr. J. H. Palmer, from 10 A.M. to 9 P.M. At 10 A.M., the temperature was 101.6 deg.; at 7 P.M., it was 103.8 deg.; and at 9 P.M., it was 103.6 deg. The next morning, at 9.30, it was 102.4 deg.

On September 16th, salicin was given in thirty-grain doses every two hours, from 1 to 10 P.M.; and the observations of the temperature were as follows: at 1, 103.2 deg.; at 2, 102.7 deg.; at 3, 103.2 deg.; at 4, 102.2 deg.; at 5, 102.4 deg.; at 6, 102.2 deg.; at 7, 102.7 deg.; at 9, 102 deg.; and 103.2 deg. at 10 P.M. No observation was made at 8 P.M.

These results and the table above show that, in this case at all events, the salicin failed to act as an antipyretic, even when most freely given, and when the temperature was observed so as to record any immediate effects. The pulse was more decidedly affected, and fell from the time the larger doses were given, and did not rise, even when some of the highest temperatures were recorded. It rose again when the salicin was discontinued, being 96 on the following evening.

The treatment adopted after the discontinuance of the salicin, on the morning of the 24th, was the free administration of alkalies during the day, and a full dose (ten grains) of quinine at night. On the first day of this treatment, the pain in the joints became much less. The temperature was 103 deg. on the evening of the 25th, before the quinine was taken; and, on the evening of the 26th, it reached its highest point, 104.6 deg.; but fell three hours after the quinine to 102.8 deg., and then steadily declined. The next evening, it was 101.4 deg.; the next, 100.6 deg.; and only once afterwards did it reach 100 deg.

During the whole period of the salicin treatment (12th to 23rd), the patient was very restless at night, and required the hypodermic morphia; the pain in the joints was severe. The smaller joints of the hands became affected on the 14th and 15th; and, on the 16th, a distinct mitral systolic murmur was discovered.

The man made a good recovery; but left the hospital too early, on account of family trouble, and returned on October 30th, with fresh rheumatic symptoms, which yielded in seven days to the alkaline and quinine treatment.

A COLD AND ITS CURE.

By JUKES STYRAP, L.K.Q.C.P., etc.,
Physician Extraordinary to the Salop Infirmary.

II.

It has been well remarked by Dr. George Johnson, that "a cold", or ordinary catarrh, although of itself not a dangerous or serious malady, is nevertheless, with many persons, an oft-recurring one, causing much annoyance and discomfort both to the sufferer and to his associates—of which fact, all of us are doubtless more or less disagreeably cognisant from personal experience; and, as *medical* treatment, notwithstanding popular prejudice to the contrary, has very considerable influence on the progress of the disorder, it is, I think, well worth our while to give the question thoughtful consideration.

The exciting cause and symptoms of catarrh, together with its popular domestic treatment, are too well known to need recapitulation. I purpose, therefore, to limit my remarks to the medical treatment which, for a period of twenty years, I have adopted with considerable success. At the same time, I think it well to note that the treatment refers to that particular form of "cold" characterised by excessive defluxion from the nares and lacrymation, and more or less febrile disturbance (and not to that which, in ordinary language, is styled "a dry and stuffy cold"), and is based on the principle of restoring the natural functions of the skin, which a chilling wind or other atmospheric influence on persons with lowered vitality has wholly or partially suppressed. There are two simple modes of accomplishing the wished-for effect: firstly, by the direct application of heat to the surface of the body by immersion in a warm bath of 100 deg., increased to 110 deg. of Fahrenheit—but in a far more efficient degree by the use of a hot-air bath; and secondly, by the action of certain diaphoretic medicines in combination—which latter are generally sufficient (and certainly the least inconvenient) to effect a cure of ordinarry catarrh. In my own person, indeed, I have never found it necessary to have recourse to a bath; still, in severe colds, it may be judicious to combine the two—the bath and the medicine. And here, gentlemen, you will perhaps permit me to read my reply to a note on the subject which I received last year from my old teacher Sir Thomas Watson, then engaged in revising his *Lectures on the Principles and Practice of Physic*, and who had expressed a wish to be made acquainted with the simple treatment of "a cold in the head", as practised by myself.

"Shrewsbury, August 26th, 1870.

"Dear Sir Thomas,—In reply to your note, I would beg to remark that the remedy alluded to is a very simple one, and the treatment based on the principle recommended by Dr. George Johnson in his recent *Lecture on the Treatment of Catarrh and Bronchitis*, and which I have carried out for upwards of twenty years with much success.

"The difference in our respective treatment by opium, however, would seem to be, that he prescribes it in a 'full dose' at bedtime (hence the nausea, headache, etc., to which he refers), with or without ipecacuanha); whereas I invariably give *small doses of morphia and antimony* every three or four hours until the sneezing and defluxion cease, which, with ordinary precaution, results after the third or fourth dose. The antimony has, in my opinion, a more special effect on the mucous membrane of the breath-passages than ipecacuanha.

"The following are the forms which, slightly varied, I have used for many years: a dose or two of either of which has enabled me on various occasions, when suffering from catarrh, to attend to my professional duties with comparative impunity. Confinement, however, to

the house for a day or two should, I need scarcely remark, be insisted on, whenever practicable. The warm or hot air-bath (or 'packing'), as suggested by Dr. G. Johnson, is a valuable adjuvant to the treatment, if had recourse to on the day of seizure; and, in severe cases, I generally recommend one or the other, if obtainable, and an immediate retirement to bed in a warm room.—Believe me, yours very truly,

"Sir Thomas Watson, M.D., Bart." "JUKES STYRAP.

℞ Liq. morphiæ (*P. B.*) ♏xl; vini antimon. ♏xxx: potassæ citratis ℈iv; syr. aurantii ʒ ij; aquæ ad ℥iv. Misce et fiat mistura, cujus sumat cochlearia magna ij quâqua tertiâ vel quartâ horâ.

℞ Liq. morphiæ ♏xl; vin. antimon. ♏xxx; liq. ammon. citrat. ℥j; potassæ citratis ℈iv; sp. chloroformi ʒj; aquæ ad ℥iv. M. Ft. mist., cujus capiat cochlearia magna ii quâqua tertiâ vel quartâ horâ.

My attention was originally directed to the value of small doses of morphia in catarrh under the following circumstances. Many years ago, I was confined to my room by a very severe catarrhal attack and bronchitis, for which antimony, etc., were prescribed by a friend with but trifling relief. For some reason or other, I was induced to add the twelfth part of a grain of morphia to a dose I was about to take, and in half an hour or so the sneezing and defluxion had considerably abated. The next few doses were taken without the morphia, and the coryza, etc., returned, and the cough became troublesome; in consequence of which, I repeated the morphia, and again the sneezing, etc., ceased. In every subsequent attack of catarrh (to which I was, at one period, very subject), I combined the antimony with morphia; and, having tested their value on myself, prescribed them for others with a like satisfactory result. In what way the morphia effects the speedy relief from discomfort which almost invariably follows its administration, I am not prepared to say. Probably, as Dr. G. Johnson suggests, it is due to some direct influence on the nerves and vessels of the inflamed mucous membrane, rather than to any diaphoretic action. Be that as it may, I would strongly advise such of you as are subject to "colds" just to try the medicine; and I entertain little doubt that the effect of its first trial will be such as to induce you eventually to thank me for the suggestion of so simple a remedy.

The antimony, in addition to its special effect on the inflamed mucous membrane, tends to counteract the usual constipating action of the morphia; and the citrate or bicarbonate of potass relieves the thirst and itching not infrequently produced (in my own case at least) by the opiate. I would also remark that, by giving the morphia in small and repeated doses of one-twelfth of a grain, combined with correspondingly small doses of antimony, it can be safely administered to persons otherwise intolerant of opiates, without suffering from the headache, nausea, and other distressing symptoms which so often follow a full dose of opium.

Mayhap some of you will mentally exclaim, "Oh! the principle of treatment has been known from time immemorial". Possibly so. Nevertheless, simple and efficacious as the treatment by morphia and antimony in small doses really is, I can truly assert that, during the not few years in which I have been in the profession, I have never seen it alluded to in any work on medicine, or practised by others than myself; which fact will, I trust, be deemed a sufficient apology for soliciting your attention to it.

In regard to the hot-air bath, I need scarcely remind you that such may be readily extemporised—the chief essential being a capacious spirit-lamp, with a large wick, usually kept in stock for the purpose by surgical instrument makers; and, being made of tin, the cost is trifling. The following will be found a simple and effective plan. Let the patient be seated, undressed, in a suitable armchair in his bedroom, and carefully enwrapped in two or three folds of blankets extending from above the shoulders to the floor, but *outside* the chair (or, still better, a hoop affixed thereto), so as to allow a free circulation of the hot air round the body. A Mackintosh cape thrown over the blankets will enhance the effect. The best position for the lamp, according to Dr. G. Johnson, is, with due precautions, between the legs, rather than underneath the chair; and it should be kept burning for twenty or thirty minutes, or until free perspiration be established. The patient should get into a warm bed between the blankets. Nervous people are apt to object to a hot-air bath so constructed, from an absurd fear of the flame of the lamp. The difficulty may be obviated by placing a wire guard over it.

In the absence of the means for providing a hot air or water bath, an effective action of the skin may be induced by wrapping the patient in a sheet or thin blanket (to which latter patients offer less objection than to a wet sheet, on account of the relative warmth-imparting feel), wrung out of moderately hot water, and enveloping him in a couple of warm dry blankets; in other words, "packing" him, as it is termed, for an hour or more, until free perspiration takes place: a plan of treatment which, I venture to affirm, you will find highly beneficial in renal and other forms of disease, notes of which I reserve for a future paper, with "Gleanings from Hospital Practice".

SOME CASES OF CATALEPSY.

By GEORGE H. SAVAGE, M.D.,

Assistant Medical Officer to Bethlem Royal Hospital; Lecturer on Mental Diseases at Guy's Hospital; etc.

ONE reads in text-books that catalepsy is a disease allied to hysteria and to epilepsy; that it is very rare, and that its onset is sudden; that the state lasts only a short period and then passes off, the patient being unconscious of what has transpired. What I have to describe differs from this. In our cases, the state was persistent. Catalepsy is an undoubted neurosis, and, therefore, allied to hysteria and epilepsy; but in the following cases the relationship was nearer to insanity. In many cases of melancholy with stupor, one sees a more or less cataleptic state, but with memory and knowledge of what was going on around. I am convinced that many of the so-called cases of catalepsy are the result of mental disease that has been of so slight intensity or of such short duration that it has been passed by unobserved.

I publish the following cases, with the permission of my colleague Dr. Rhys Williams.

All the cases were males; all were young; in one only was there distinct family taint; all suffered from melancholy, and were at times dirty; and all will pass into dementia and cease to be cataleptic. I cannot explain why in this process of decay, for a time, persistent muscular action is seen. In the insane, we may have insane organs and insane muscles; that is, organs or muscles that are not controlled by the nerves, or in which the nerves are discovered. Thus, we have had lately a series of cases of torticollis in melancholic patients.

The first case was one of catalepsy following melancholia. The patient was Alexander C. B., a letter-sorter, single, aged 23. He inherited no neurosis; had been sober and industrious. He received injuries seven years ago from being run over, but the effects passed off. The cause of his present illness was supposed to be worry; he fancied that he would be accused of theft; he became more and more nervous, and gave up his work. He gradually seemed to shrink into himself. I first saw him at the Westminster Hospital with Dr. Sturges, whence he was transferred to Bethlem. On admission, he was thin, sallow-looking, with cold moist skin; pulse small, rapid, and weak. He ate fairly, and slept well. In whatever position he was put, there he remained; and on several occasions he maintained the outstretched position of his arm for two hours together. He could be made to stand on one foot, the other being outstretched in front. He did not flinch if slightly pinched, but did if pricked or severely pinched. Everything had to be done for him. At first, he was wet and dirty. We used the continuous current through his head daily; and for a time were able to get some movements following a word of command. The interrupted current produced more pain and more results. He was induced to follow another patient; and, as long as this patient walked slowly and steadily, the cataleptic followed like his shadow, not eighteen inches from him. No power of initiation was obtained; and, after three months, he was discharged uncured.

The next case was that of Frederick M., bank clerk, aged 27. One of his brothers was insane. He had had no previous attack. He was first restless and uneasy; gave up his situation, and left England. He still felt miserable; and at length attempted suicide by dividing the skin and muscles of his left arm down to the bone, at New York. On the wound healing, he was brought to England. On admission, he was in a similar state to the last patient. As his limbs were left after one meal, so they would be found at the next. The appetite was voracious; and the patient slept well. The damaged arm was galvanised; and the wounds over the knuckles and in the palm healed. This patient would maintain the same position for hours together. He was wet and dirty. As he is now (November 30th) steadily losing what was left of his mental powers, so is he losing this cataleptic state, and will, no doubt, soon simply be a dement.

The last case I shall give is that of Thomas H. F., aged 20, a clerk. He had no insane relatives. The supposed cause of his illness was family and pecuniary troubles. He was naturally cheerful and industrious. Seven months before admission, he lost his interest in his work and surroundings, and complained of "feelings in his head". He was suicidal, and had hallucinations of hearing. He ate his food, if fed with it; and slept fairly well. On admission, he was typically anæmic and will-less. He was led about by others; and, as they left him, so he remained. Morphia subcutaneously was tried, and galvan-