

the crude state, half to a grain and a half, while that of the tincture is 10 to 30 minims, instead of an equivalent of 4 to 12 minims. Similar discrepancies appear in the other preparations. The dose of chloroform is 3 to 10 minims, and, when dissolved in spirit, only 1 to 3 minims. Again, the dose of lime is  $\frac{1}{2}$  grain to 2 grains in liq. calcis; but sugar, the only other ingredient in liq. calcis sacch., reduces the dose over 50 per cent. Many similar instances might be quoted. Which dose of digitalis,  $1\frac{1}{2}$  grain of the crude drug or the active principle of 2 grains, would be received in a law court as evidence, as each are "by authority"? What criticism would the book receive had it been the work of a single compiler. To wait ten or twenty years for a new edition is a long time, so I would suggest that in the first appendix all the tinctures of which the smallest dose is less than half a drachm should have a corresponding dilute one, and all those having a larger initial dose should be made stronger, so that the smallest dose—viz., half a drachm—be the same in all tinctures (excepting, of course, the present ones, which would have an affix, fortior or diluta, as the case may be). Then in nearly every case the maximum dose will be two drachms. Similarly with the fluid extracts, which represent, with one exception, opium, the virtues of the same weight of the crude drug, the dose of which in nearly every case not quoted might be made to correspond with the tinctures. With this slight alteration a prescriber would have eighty isolated facts less to remember, and if the other groups of preparations were treated in a similar manner the doses of over 200 preparations might be equalised to five or six, each one corresponding to the particular group of preparations. An alteration of the Pharmacopœia in this spirit would, without doubt, meet the approval of a very large proportion of the medical profession. Apologising for so long a letter, I am, Sir, yours truly,

WALTER J. KILNER, M.B., M.R.C.P.

Ladbroke grove-road, W., Sept. 27th, 1885.

#### APOMORPHIA AND THE BRITISH PHARMACOPŒIA.

To the Editor of THE LANCET.

SIR,—Some of the directions given in the new Pharmacopœia are certainly inexplicable. Take the case of the injectio apomorphiæ hypodermica, for example. We are told that "the solution should be made as required for use," but surely there are no pharmacological grounds for the assertion. Years ago it used to be said that the solution should be freshly prepared, but that idea is long since exploded. The chief use of apomorphia is as an emetic in cases of poisoning, and its great advantage is the marvellous promptness with which it acts. Fancy being called out in the middle of the night to a case of opium-poisoning, and then wasting the precious moments in weighing out two grains of hydrochlorate of apomorphia, and waiting till they dissolve in a hundred minims of camphor water. The whole thing is absurd, and would be laughable were it not for the fact that, unless some protest is made, many a valuable life will be sacrificed to a blind belief in the wisdom of a Pharmacopœia. The right thing is to keep the solution ready made. I have before me an apomorphia solution which has been in constant use for the last two years, and it is as active and free from irritating properties as it was on the day it was made. It has turned green, of course, but there is no harm in that, and the patient who would object to an antidote or emetic on account of its colour would indeed be hypercritical. I ought to say, perhaps, that my solution was not made according to the formula given in the new Pharmacopœia; in fact, it would not, I think, occur to most medical men that camphor water was at all a good solvent to employ. Martindale's solution contains 1 per cent. of absolute phenol, and will keep any length of time. The "compressed tabloids" of apomorphia, a tenth of a grain in each, are excellent and are uniformly trustworthy. It is not for me to suggest the use of any particular formula; but if the official pharmacists cannot provide us with something that will keep, the sooner the matter is reinvestigated the better. Take an analogous case. What would be said of a corporation which advocated the use of a fire-escape which was never ready, but had to be constructed when required for use?

I am, Sir, yours truly,

Weymouth-street, W., Oct. 1885. WILLIAM MURRELL M.D.

#### THE "VAPOURS" OF THE BRITISH PHARMACOPŒIA.

To the Editor of THE LANCET.

SIR,—The therapeutic value of medicinal agents used as vapours seems to some extent to be recognised by the addition of six "Vapores" to the new Pharmacopœia. From the directions given for the use of these agents it will be seen that the conditions proper for such use have probably not been sufficiently well considered. With regard to the first—the Vapor acidi hydrocyanici—it may be asked, what advantage is there in adding the 10 to 15 minims to a drachm of water; and what is intended by a suitable apparatus? In the case of the Vapor chlori, it is suggested by the directions that heat is to be avoided. It may be asked, Does the chlorine vapour escape in such a way as to be of therapeutic value without increased temperature?

In regard to the Vapor coninæ, it may be asked, What proof is there that the active properties of hemlock juice are volatilised under the conditions given; that is to say, whether this "vapor" is of any value whatever?

The fourth of the series, the Vapor creasoti, is as follows: Twelve drops of creasote are ordered to be mixed with eight ounces of boiling water; that is to say, in the proportion of one drop and a half to the ounce—that is, 1.5 min. to 480 min., or .312 per cent. Assuming that the creasote evaporates with the water equally, the whole eight ounces of water must be evaporated in order that the twelve drops of creasote should be vaporised. In the directions, however, it is arranged that only air is to be drawn through this mixture. It would be interesting to know what idea was in the minds of those who prepared this "vapor." The Vapor iodi may be passed over with the remark that it is more reasonable than the last mentioned.

The last of the series, the Vapor olei pini sylvestris, requires some notice. Practically, it is as follows: Forty drops of the oil of fir wood are to be added to water to make one ounce—i.e., 40 min. to 480 min. One-eighth of this—that is, five drops of the oil—are to be added to half a pint of cold and half a pint of hot water—that is, in the proportion of 5 min. to the pint of water (9600) or 1 to 1920. Enough has been said to show that this subject requires a little more consideration in the next edition of the British Pharmacopœia.

Yours, &c.,

Savile-row, Sept. 17th, 1885.

ROBERT LEE.

#### "MESMERISM AT OWENS COLLEGE."

To the Editor of THE LANCET.

SIR,—In the first place, permit me to challenge both the facts and inferences contained in the letter of your Manchester correspondent, which appeared in your issue of Sept. 19th, and to express my opinion that you have not exercised your usual discrimination and discernment in allowing space for such thinly-clothed personal animosity. I find, from one of your annotations in THE LANCET of last Saturday you express indignation that "the responsible members of a teaching university" should have gone to the extent of lending a hall for the purposes of an American expert in mesmerism. Allow me at once to claim absolution for the responsible members of the Owens College, who granted me, as President of the Manchester Medical Society, the use of the chemical theatre for that particular evening without knowing anything whatever about the object for which it was to be used. If an error so grave as to merit your solemn condemnation has been committed, permit me to assume the entire responsibility, and to explain all I can in mitigation of your censure. For the evening of Sept. 5th, I invited the whole of the profession in this district to witness a practical demonstration by an American, who was reported to have unusual mesmeric powers, and who, I had been informed, had succeeded in his native country in creating an extraordinary amount of professional interest and public controversy. To investigate the merits of a man who enters a town with a substantial reputation of being able at will to lower the pulse to 40 or raise it to 150, to influence the temperature, abolish or intensify all the senses, and to augment or suspend sensation, is, I think, a subject fit and proper for immediate investigation by any body of scientific men, and in any hall, academic or otherwise, and certainly a subject

well within the scope of a society composed entirely of medical men. Whatever may have been the opinion of some, the general impression of Professor Kennedy's mesmeric powers was highly favourable, and none ventured that evening, although they had ample opportunities, to question his *bona fides*. Were I in a position to prove Professor Kennedy to be the itinerant knave your correspondent assumes him to be, I should have been just as anxious to expose him as I am at present to obtain for him justice.

Professor Kennedy distinctly repudiated the notion of his possessing any special or extraordinary mesmeric power. He made no absurd pretensions to physical contact, or any claims beyond that of a trained will exercising unequal control over an unsuspecting and unresisting mind. What he claims to accomplish he admits any other intelligent person can do equally well with patience and practice.

The writer of your annotation is candid to admit that there are some individuals "who, possessing powers of reason little or not at all impaired," will surrender their actions and convictions to the will of another with shrewder intelligence. If it be true that one individual can suspend at will the actions and convictions of another, I regard it as a matter of the most vital social importance to take every opportunity of ascertaining the limits of those who profess mesmeric powers, and possibly protect those confiding creatures whose "powers of reason are little or not at all impaired" from gross imposition.

If it were necessary to seek a precedent for similar demonstrations being held in halls as sacred as the chemical theatre of the Owens College, I might enlarge upon the members of the House of Commons not only countenancing but encouraging "thought reading" within the precincts of our legislative chamber. Neither can I remember any exception being taken to a gentleman who upon one occasion entertained the senate of one of our universities on the same subject. Hypnotism was discussed in the Physiological Section of the British Medical Association at Cambridge, under the presidency of Michael Foster. In Paris the subject has occupied the attention of the medical profession to a considerable extent, and one need only mention the observations of Charcot, Heidenhain, Professor of Physiology in the University of Breslau, associated himself with M. Fleusen, a professional mesmerist, to investigate the subject, and gave demonstrations, having his brother, his assistant, and several very intelligent medical students as his subjects. The late Professor Berger, of Breslau, also investigated mesmerism, and endeavoured to ascertain its therapeutic value.

I leave it to your further consideration whether it is better to leave mesmerism in the free hands of charlatans, or for the profession to relegate it, if possible, to its legitimate position and proper uses, presuming it to have any. So far as I am personally concerned, I have no intention of diverting my attention from other subjects, in which I am more particularly interested, in favour of mesmerism, but shall leave the matter to those more intimately connected with the nervous system and therapeutic agents.

I am, Sir, yours faithfully,

Manchester, Sept. 29th, 1885.

WALTER WHITEHEAD.

## ANTIPYRIN IN ACUTE RHEUMATISM.

To the Editor of THE LANCET.

SIR,—Among the cases of acute rheumatism which I had to deal with last winter while resident medical officer at the Bury Dispensary Hospital, there were a few in which the treatment by salicylate of soda failed to produce that rapid relief of symptoms which usually follows its employment. Renewed pains in the joints were accompanied in one or two instances by a pretty considerable elevation of temperature.

In the earlier months of the period to which I refer I gave kairin and hydrochinon in these cases, merely with the object of testing the temperature-reducing power of these two drugs in acute rheumatism. I did not observe any special effect, other than antipyretic, of either of these remedies. I did not find, for instance, that they at all checked or diminished the pain in the joints, nor did I expect them to have that effect. But what I did think at that time was that a dose or two of kairin seemed to aid the action of the salicylate. A case which had previously obstinately resisted treatment by the latter drug seemed to become more amenable to its action after the temperature had once been brought down by kairin.

Early in January of this year I gave a thirty-grain dose of antipyrin to a patient suffering from acute rheumatism, who had not previously had any other treatment. Two hours after the medicine had been administered the temperature had fallen from 104.2° to 99.4° F. Fifteen grains more of antipyrin were then given, and this dose was followed an hour afterwards by another fifteen grains. Before the first dose (thirty grains) was taken the patient had suffered great pain in both ankle-joints, which were swollen and tender on pressure. There had also been a good deal of pain in the right knee- and shoulder-joints, as well as in one of the wrist-joints. After the second dose there was profuse perspiration. The extremely pinched and pained expression of face which was noticed at the commencement of treatment had made way for a more cheerful cast of countenance, and, on being asked whether she was at all better, she replied that the pain was almost gone, and that she only felt it now on attempting to move the joints. This surprised me, for I had never before seen such rapid relief in similar cases, even with salicylate of soda or salicin. I therefore determined to go on with the antipyrin in this case. No salicylate was given. Twenty-grain doses of antipyrin were administered every two hours that day; and during the afternoons of the next five days the same doses were used every four, and sometimes every three, hours. In the forenoon smaller doses (ten grains each) were given every hour and a half. On the sixth day of treatment there was not the least pain left in any of the joints, excepting the left wrist and elbow. These articulations were not quite free from pain when moved. The temperature had during these six days varied considerably. After the third day it never rose above 101°, and on the sixth day it was normal. Small doses (ten and fifteen grains) of antipyrin were continued at variable intervals for three days longer, and then the patient got up and moved about freely without the least pain in any of the joints, while the temperature also remained normal. The case was then discharged cured. On the evening of the third day of treatment there had been some troublesome frontal headache, but ringing in the ears or sickness after the medicine was not observed. Sweating was profuse during the first two days of the treatment, but afterwards there was not very much perspiration. The pupils were found rather dilated after a twenty-grain dose of the drug. Accompanying the reduction in temperature after the antipyrin was first given was a corresponding fall in the rate of the pulse. The pulse was also decidedly firmer than before the medicine had been given.

It was not till Feb. 14th that I again had an opportunity of testing the value of antipyrin as an anti-rheumatic remedy. The following are notes of the case which I then treated.

Feb. 14th (8.13 P.M.).—Clara W—, aged eight, a very fair complexioned child, with tolerably well-nourished body. She has for two days been suffering from severe pain in the knees and ankles, which are swollen and tender on pressure. The least movement of the affected joints causes much pain. The right hip- and left shoulder-joints have also been implicated. During the previous night pains had been so severe that the patient had no sleep. Much sweating, and a sour smell. Temperature 103.6°. Pulse 120 per minute. Ten grains of antipyrin were given, dissolved in water, at 8.13 P.M. At 8.25 P.M. the temperature was 102.8°; the pulse beating 110 per minute. The patient perspired freely. 9.40 P.M.: Temperature 99.8°; pulse 90, now and then irregular and intermittent. The skin cool, the face pale, and the patient very sleepy. 10 P.M.: Temperature 99°. The perspiration continuing. At 10.30 P.M. the temperature was 98.4°. At 1 o'clock the mother was directed to repeat the dose (ten grains). She did this, and gave the child another dose at 8 A.M. On the 15th she stated that she could see the medicine was doing the child good, and therefore she had not been able to resist the temptation of giving one more than the prescribed dose.—15th (11 A.M.): The patient has slept soundly all night. Pain in joints gone. Temperature 98.4°. Eight grains of antipyrin were given at noon. 4.30 P.M.: Temperature 98.8°; seven grains given. This dose was repeated that night and at 8 A.M. on the following day.—16th: Four doses (seven grains each) of antipyrin were taken during the day.—17th: Three doses, seven grains each.—18th: Two doses, seven grains each. No return of pain. Temperature normal. The treatment was stopped, and the patient was cured by Feb. 20th.

There are at present under treatment in this infirmary