passed through several pregnancies without accident, when within a fortnight of the natural term, was seized with severe accidental hæmorrhage whilst going upstairs, and without any previous pain. Examining her immediately on my arrival, and within a quarter of an hour after the commencement of the hæmorrhage, I found the orifice of the uterus as large as a half-crown piece, and as yet too rigid for interference with a view to the delivery of the child. Very slight hæmorrhage was going on, and she was in no pain. No trace of the placenta could be felt within the circle of the orifice as far as the finger could reach. I at once passed an elastic bag, and distended it with air so as to completely fill the vagina. The face at this time was pale, the pulse of fair strength, the voice good, and there were no indications of collapse. After about three hours, during which there was no bleeding, I again examined the patient, and found the orifice slightly larger. Her husband being at this time accidentally absent, I sent for Dr. Barnes, who arrived in due time, and, after a short delay, applied the forceps and delivered her of a dead child. There was no pain either before or directly after the delivery. Dr. Barnes at once introduced the hand into the uterus in the absence of pain, and immediately extracted the placenta with a considerable amount of coagulum. The uterus contracted firmly. No pain was induced by the extraction of the placenta, nor was there any hæmorrhage; but, taking into account the exhausted state of the patient and the probability that a further small amount of hæmorrhage might prove fatal, it was decided that the uterine cavity should be injected with a solution of the perchloride of iron. Some solid perchloride was mixed with water; and no sooner was the iron injected than the patient began to complain of severe pain in the hypogastrium. It was agreed to administer opium as required. This was done in three doses of nupenthes of twenty minims each, or one fluid-drachm in all, but without in the slightest degree alleviating the pain; in fact, it rather increased in severity, and she died exhausted in about seven hours. I saw her about ten minutes before her death, when the pulse was very weak; but the patient was quite conscious, and able to speak about her husband and other matters. No *post mortem* examination was made.

I know not what feelings this case may produce with practical accoucheurs generally, but with me it causes a feeling of painful astonishment. To introduce the forceps in a case of accidental hæmorrhage, where the bleeding had ceased and no pain was present to indicate any tendency to contraction, and to extract the child, appears unaccountable. To immediately introduce the hand in the absence of pain, and remove the placenta, without taking any previous means to ensure contraction, is only marvellous it was not followed by serious hæmorrhage. And, if this be the practice which Dr. Barnes generally adopts, it is no longer to be wondered that, according to his own statement, he "had seen many women bleed to death". The uterus is said to have firmly contracted; but it must have again relaxed to admit the hand being afterwards passed into the uterine cavity. And again to introduce the hand, in the absence of any hæmorrhage, and in the absence of any pain, and to throw into the uterine cavity a solution of perchloride of iron, probably of considerable strength, was so extraordinary a proceeding, that I hesitate to characterise it by any words. Suffice it to say, that no sooner was the solution of iron injected than the patient began to complain of severe pain at the hypogastrium; that this pain continued, rather increased in severity; and the patient died exhausted in about seven hours afterwards. No more blood was lost after the first quarter of an hour. What, then, produced this deadly effect?

In commenting upon this case at the Obstetrical Society, Dr. Barnes remarked: "Certainly the pain must be attributed to the injection; but it did not follow it was the cause of death. The prostration was already extreme, and the fatal termination was, as had been pointed out by a previous speaker, probably due to 'shock.' In extreme exhaustion from bleeding, a very slight cause was often enough to extinguish the patient's life" (*Obstetrical Journal*, April, p. 48.)

The statement "the prostration was already extreme," does not accord with the condition described, "the face was pale, the pulse of good strength, the voice good, and no indication of collapse." But inaccuracies of this kind are of too frequent occurrence to need more than a passing notice. And I fear it will require the "subtle argumentations of Zoilistic critics" to convince any practical medical man that a lady of strong wiry constitution, who had been in severe pain for about seven hours, who never lost her consciousness, who ten minutes before her death was sufficiently collected and aware of her approaching end as to speak about her husband and other matters—had died from "shock." I am well aware that every possible excuse is resorted to to palliate these fatal cases. Now it is "shock"; at another time "puerperal fever." Now it is "septicæmia"; then again "puerperal peritonitis, and other puerperal complications." Now "pyæmia"; and then any other excuse the case may admit. But these excuses do

not justify the injection of the perchloride of iron, nor prevent the lives of other women being lost when a similar treatment is employed. What, then, caused the death? In the absence of a *post mortem* examination, the cause can only be one of conjecture; yet, judging by what has been known to take place in other cases, the conjecture assumes the position of strong probability. Severe pain at the hypogastrium has been observed in other cases, and in them it arose from a strong solution being employed, and this running down upon the sensitive structures of the vagina. Women have writhed in bed for hours from a similar cause, yet it has passed away without further ill effects than the suffering inflicted. If I am correct in the belief that the danger in the use of these styptic injections arises from the substances injected being taken up by the pervious veins, in the absence of complete contraction, and being conveyed into the general system, this case will admit of easy explanation. Throughout the whole case, nothing was more apparent than the absence of any pain indicating any tendency to contraction. And in an organ thus relaxed, when no hæmorrhage was going on and no urgent symptoms present, and without any other means being adopted to induce contraction of the walls—a strong solution of perchloride of iron was injected, and followed by the death of the woman in about seven hours afterwards. What is more probable than that the perchloride was directly taken up by the open veins or sinuses, carried into the general circulation, and produced the deadly effects, only more quickly, which have been known to follow in other cases? Hence, again, arises this question: Is any one justified in having recourse to means which may have such serious results, when other remedies, which have never been noticed to be followed by such consequences, may be employed to induce what was required—contraction of the gravid uterus?

It may be some excuse for the treatment adopted, to remember that Dr. Barnes entertains the notion that these styptics chemically seal up the mouths of the vessels, and corrugate the inner surface of the uterus; and that, entertaining this notion, he may have supposed there was little or no danger incurred by injecting the cavity of the uterus with a strong solution of the perchloride. But, if anything will tend to disabuse the mind of any one from this patent fallacy, it would be, I should imagine, the experience of such sad cases as these. And, again, the question will force itself upon the mind—Why does Dr. Barnes never allude, until he is forced, to these fatal cases which have occurred in his own practice? Dr. Routh mentioned another fatal case to which Dr. Barnes had been called in consultation: why is this also forgotten in the general oblivion of the grave? Would it not be better for our self-indicated medical Homer rather to sing of these disastrous occurrences, which might serve as a beacon to prevent others from falling into similar mistakes, than to indulge in "long-tailed similes" of unalloyed successes, or in the various flights of fancy we have been obliged to touch upon?

CURRENT VIEWS ON TREATING STRICTURE.

By BERKELEY HILL, M.B., F.R.C.S.,
Surgeon to University College Hospital.

IN the *BRITISH MEDICAL JOURNAL* for December 20th, 1873, views are held up to obloquy by Mr. Savory which he terms "current," but which I venture, nevertheless, to believe to be "old-fashioned," if not obsolete. Mr. Savory attacks the employment of instruments for treating urethral obstructions of all kinds, which he alleges to be still customary.

Mr. Savory's conduct calls to mind that of Don Quixote when charging the sacks of flour in the mill, with this difference—the gallant knight-errant found his imaginary foes already erect before him, while Mr. Savory has had to raise up from the dead the objects of his wrath. For it is to be hoped that the treatment of all urethral obstructions, spasmodic, congestive, and organic alike, by instruments as routine practice has been discarded by properly trained surgeons. To impress his readers with the terrible evil of bougie treatment, Mr. Savory informs us that a distinguished surgeon once said, "Had bougies never been invented, it would, on the whole, have been a great gain to humanity." Why not go further, and quote the anecdote of the two eminent physicians, both now dead, who were crossing the canal-bridge at Camden Town, on their way to a consultation at Hampstead, when one asked the other whether it would not be, on the whole, a benefit to humanity if all doctors were then and there thrown into the canal? His companion was, indeed, for the moment, of opinion that the sacrifice of the Faculty by drowning would really be advantageous to mankind. But arguments valid against an abuse of a remedy lose much of

their force when that abuse has been subdued by more exact knowledge to a legitimate use.

At the end of his paper, Mr. Savory alleges that the sum of his argument is, after all, not to suggest that instruments are never to be employed, but to affirm that they have been and still are grossly abused, and that, in a word, instruments of any kind should never be employed in any way except as a last resource. With much of this everyone must agree; but the statement, that instruments should never be employed except as a last resource, needs some qualification. In many cases, it is impossible to ascertain what is the matter without using instruments, and any treatment under such circumstances might be "routine," but certainly would be useless. Were the comparatively modest position at the end of the paper the only one taken up by the writer, it would not call for special remark; but there is more. There is confusion, under the term "stricture," of conditions that are now currently held to be not strictures at all, and are expressly distinguished from organic obstructions by all leading authorities in this department of surgery.

Mr. Savory says, "Any advanced student or young surgeon, if asked what he understands by the term stricture, would reply, a constriction of a portion of the canal due to thickening and deposit in its walls." And the student would be right; it is Mr. Savory who makes the error of calling spasm and inflammatory swelling strictures. These misleading names, given at a time when the distinctions in nature and requirements of treatment were ill understood, are yet employed by some, it is true, but without thereby intending to imply that these temporary obstructions are similar in nature to organic obstruction; and the surgeon who still looks upon spasmodic contraction, inflammatory swelling, and organic stricture as simple physical conditions to be treated only by physical means, had better take the advanced student, whose acquaintance with the subject is, nevertheless, second hand, for his teacher without delay. Certainly, more exact knowledge of the differences between these obstructions is current in standard treatises on urinary diseases, and the mischief that may be caused by using instruments in spasm and inflammatory swelling is carefully pointed out. So far from instrumentation being directed as routine treatment, to the neglect of other means, even in organic stricture, such writers as Civiale and Thompson, to mention no more, warn their readers against hastily using bougies, which those masters strongly insist are evils even when most needed. And, whatever old-fashioned or obsolete books may direct, in no standard treatise of the present day is the use of instruments given as the sole or most important means of treating anything but organic obstructions.

Next, the reproach is made against instruments, that they do not afford a cure; that, though the passage may be widened to the normal extent for a time, it ultimately shrinks back to its dangerous constriction, and no permanent cure is effected. This is true, doubtless. There is no cure for stricture, if, by cure, we mean putting the urethra into such a condition that no further attention is necessary. A system of treatment that procures such a result has yet to be found. But, if by cure be meant restoration of the canal, so that it can be easily maintained at its full calibre throughout, the use of instruments does cure stricture, and it has yet to be proved that any other plan will do the same for organic obstructions. Apparently, one of Mr. Savory's objects in writing was to lead the profession to suppose that organic obstructions can be dissipated by his plan of treatment—that rest in bed for an indefinite time, with warmth and other adjuvants, can cause the absorption, either wholly or in part, of organic obstructions. Undoubtedly—and this is also current knowledge—the remedies on which Mr. Savory relies are efficient to remove the spasm and inflammatory swelling that often aggravate the inconvenience or suffering of an organic obstruction sufficiently to induce the possessor to seek surgical aid; but, when this is done, is any further progress made towards widening the canal? To ascertain this, the canal must be gauged by the hated bougie after spasm has subsided, and again when a week or a fortnight, or any time thought requisite, has been passed by the patient in his bed, and the measurements compared. If Mr. Savory have done this, and find the organic thickening gone, he has made a discovery of the highest value; but this is not told us in his paper. Otherwise, which patient will take leave of his surgeon with the most satisfied mind—he who has learnt to pass with ease along his urethra a bougie as large as the natural size of his canal, and has simply to do this, from time to time, to maintain the full patency thereof, or he who, having spent a fortnight in bed, finds he can pass his urine comfortably now his passage is somewhat widened by the subsidence of spasm or inflammatory swelling, but has still a tough and narrow part that will be tightly closed the next time spasm sets in, or a cold is caught? The one man knows that, if temporary irritation attack his urethra, there is still room for the passage of his urine while the attack lasts;

the other knows he must be constantly on his guard against accident, and live by rule, that his narrowed urethra may suffice for his daily needs.

It is useful to lift up the voice against the rash employment of instruments in urinary diseases; there are always too many inducements to employ the bougie or sound; but this may be done without depreciating the current teaching and knowledge of these diseases, and casting mischievous prejudice on a valuable remedy.

THE DEPRESSANTS OF THE CIRCULATION AND THEIR USE.*

By J. MILNER FOTHERGILL, M.D., M.R.C.P.

THE aim of medicine, indeed its practical utility as an art, is to do good to the suffering and the sick. It has often been alleged that the scientific study of medicine has done little or nothing to further this end, at least comparatively little; and we not seldom hear that modern therapeutics directed by science are, as regards results, inferior to the empirical practice of our predecessors. That there is any truth at all in such statement, is and must be a matter for regret. It is certain, however, that all attempts to apply science to the elucidation of our every-day practice meet with ready and indeed warm appreciation. If we can make modern physiology or chemistry explain to us the manner or the mode of action of remedies with whose use we are familiar, it will go far to convert the special knowledge acquired by one shrewd observer and successful practitioner into a heir-loom for his successors, instead of being, as of old, an individual property which too commonly died with its possessor.

By observation and patient comparison of cases, our predecessors have arranged remedies into classes, and have described the peculiarities of each agent in a manner which must elicit our admiration: and the practical skill with which certain of them wielded their remedial agents still evokes our warmest praise. For instance, Graves laid down, with consummate skill, rules for the combined administration of opium and antimony in varying proportions, according to the circumstances of the case. Ringer's abridgement of it runs thus: "Each drug appears to assist the action of the other; and the relative doses must be determined by the circumstances of the case. In furious delirium, the tartar emetic must be given in full, and the opium in small quantities; while, if wakefulness is the chief symptom, the delirium being not very boisterous, the dose of tartar emetic must be reduced and the opium increased."

The exquisite correctness of these directions will become more apparent as we proceed. But this acquired skill could not be communicated, even to those who were familiar with the practice of these empirical masters of the past; an occasional pupil might be able to comprehend his master and imitate him, more or less perfectly; but usually only disconnected bits of his art were retained, and these soon lost all traces of the pattern which characterised the whole, of which they were fragments.

Recent scientific work, and especially physiology, is now stepping in to remedy, to some extent at least, this condition of matters; and, by explaining how the different agents achieve their results, is throwing a ray of light along the difficult and broken pathway of empirical therapeutics. To attempt to take even a bird's-eye view of the position of therapeutics at this moment, would be alike futile and impossible here; and the section to which I propose to draw the attention of the Society to-night is that connected with the circulation by means of its innervation. We all know that the nervous supply of the circulation is now attracting the attention which its importance merits, and that much has been done in this subject recently, both at home and abroad. From being an obscure fact in anatomy, the vaso-motor nerves and their allies are rapidly taking a prominent position in physiology, and they will ere long occupy an equally important position in therapeutics. These nerves are found running along the blood-vessels, the arteries especially, and control or regulate their calibre. By them the muscular coat is kept in a state of semi-contraction normally, and through them the calibre of the smaller arteries is lessened as in the cold stage of ague, or enlarged as in the full but soft pulse of dilated vessels in ordinary pyrexia. By their means the arterial system is kept at its normal tension, and the blood, pumped in by the heart, is restrained from at once escaping again into the veins. Thus the elastic arteries are kept gently on the stretch, and the intermittent current from the heart is converted into an even steady stream in the peripheral capillaries. But this pressure in the arteries, or the arterial tension as it is

* Read before the Medical Society of London.