

and even on paralysis and on mania, in their varied forms,—in a word, on a *whole Class* of paroxysmal diseases.

I would here specially remark, or repeat, that impeded flow of blood along the external jugular is seen, first, in the fullness of this vessel itself; second, in that of the intermediate blood-channels; and third, in that of the temporal artery; and that the effects of compression of the subclavian are seen in the lividity and coldness of the hand and fingers; but the *arrière* connexions of the internal jugular and of the vertebral veins are more deeply seated, and impeded circulation in these vessels is manifested chiefly by *symptoms*—the symptoms of cerebral and of spinal epilepsy respectively.

I may now ask an important question—What are the exciting causes of trachelismus and its phenomena? And I answer, first, emotion; and second, the excitants of reflex action—new subjects of investigation and study in the science and art of medicine.

I am quite aware that neither the professional nor the public mind—they are, indeed, nearly on a par—are raised sufficiently for views so “rational.” But, then, I do not write for the present day; and the day will come—and I shall promote its advent—when medicine will form a Science, based on physiology, and calling in the aid both of theory and of observation. These fountains of science will be viewed as allies, not as opponents, and we shall have our Adamses as well as our Hinds, even in medicine. The great Louis, in devoting himself to *observation*, and rejecting the *dreams* of Broussais, would be the last to oppose just and legitimate *theory*. It is strange, that in the nineteenth century we should be gravely urged to look and listen, but not to reason or to think; to observe, and yet not to experiment, not to theorize. Besides, theory, and even hypothesis, leads to observation, by teaching us how and what to observe. The hypothesis of a planet exterior to Uranus led to the detection of Neptune. What reflex actions were noticed formerly? Yet who, except the prejudiced, fail to observe them now?

I here conclude this little sketch, but not without one or two final practical remarks.

There is no degree or form of apoplexy or mania which may not be paroxysmal, and dependent on trachelismus. This is also true of paralysis. One patient suddenly and completely lost the power of articulation at one time, and of writing at another, to recover them after an interval. Another patient lost the power of articulation; a second, the use of the arm, and a third, the use of both arm and leg, yet only for a time.

In most of these cases, but not in all, the paralysis is not only paroxysmal, but more or less combined with spasm—that is, they are not cerebral only, but spinal.

The difference between these paroxysmal forms and the permanent forms of this Class of disease, will now be perceived to be immense. They are especially more curable.

The objects forming this class are far more intimately allied than has been supposed; apoplexy, paralysis, mania, have alike resulted from an epileptic seizure. Minor degrees of the former have occurred from milder degrees of the latter; and even in the entire absence of epileptic symptoms. But to the physiologist there is a bond of union between them all. All may equally, and conjointly or separately, arise from emotion or the excitants of reflex action; from the occasional effects of these inducing contraction of the muscles of the neck, of this on the veins, of this again on the capillary circulation, of this on the condition of the cerebrum, and of the medulla oblongata—whence the Class of paroxysmal, cerebral, and spinal diseases.

Before I conclude I must make one further remark on the structure of the veins of the neck. These are so provided with valves at their conjunction with the subclavian as to cut off the influence of the venous circulation in the fore-arm and arm. Without this provision, each energetic use of the anterior extremity, as when the blacksmith raises his heavy hammer, or strikes with violence on the anvil, would be attended by a blow or shock to the cerebrum, or the medulla oblongata.

One remark more, which I owe to Mr. Hilton, of Guy's. The subclavian artery and vein are protected from the ordinary and normal action of the subclavian muscle by a firm fascia. It is only in its violent abnormal and spasmodic action that the hard and tumid belly of this muscle is made to compress the subjacent vein.

I have, on a former occasion, drawn the attention of the profession to the important distinction between paralysis and spasm-paralysis. In this paper I have, I think, done a service to my profession by calling its attention to *paroxysmal*

paralysis, as well as to other paroxysmal affections of the nervous system. These two forms of nervous affection may be combined in the same individual, or occur separately, and present a subject for careful investigation.

I have also noticed cerebral epilepsy. This affection is nearly allied to the paroxysmal form of apoplexy.

As to paroxysmal mania, it is similar in nature to the mania which succeeds to a fit of epilepsy, only occurring without epileptic phenomena.

The principles of treatment embrace the *prevention* and the actual *remedy*, and consist in avoiding or removing causes—1, of emotion; and 2, of reflex action. I must not on this occasion enter into particulars.

I conclude by the following brief recapitulation of the topics thus briefly discussed for the first time in medical literature:—

1. *Emotion and Excitants of Reflex Action;*
2. *Irregular and Inordinate Contraction of the Muscles;*
3. *Compression of the Veins;*
4. *Congestion of the Organs en arrière;*
5. *Cerebral and Spinal Paroxysmal Diseases—viz.,*
6. *Paroxysmal Apoplexy, Paralysis, Mania, Epilepsy, occurring singly or consecutively.*

Manchester-square, Feb. 1849.

DESCRIPTION AND ENGRAVINGS OF A SYPHON FEMALE SYRINGE, AN UTERINE DOUCHE, AND A UNIVERSAL INJECTING APPARATUS.

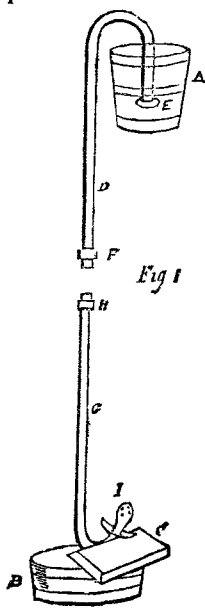
By W. JONES, M.D., M.R.C.S., &c.

PHYSICIAN TO THE FREE HOSPITAL FOR WOMEN AND CHILDREN.

FIRST. The Syphon Female Syringe.—One of the greatest difficulties we have had to contend with in the treatment of uterine diseases, especially of the cervix and adjacent parts, has resulted from the want of an efficient, simple, and economical instrument by which fomentations, medicated water, &c., might be applied in sufficient quantity to produce the desired effect. The syphon female syringe accomplishes this desideratum. Primarily (thanks to gutta percha), it may be manufactured at so trivial a price as to place it within the reach of all persons. Secondly, it is so simple in its application, that a child might use it. Thirdly, it is so efficient, that there is no limit to the quantity of fluid which may be thrown in by increasing the supply. It consists simply of nine feet of gutta percha tubing, three-sixteenths of an inch in the diameter of its bore, divided into two lengths, one seven feet and a quarter, the other one foot and three-quarters in length. To one extremity of the longer portion a small lead weight is attached; and, to the other, the male portion of a union-joint, made of box-wood. To one extremity of the shorter portion, a corresponding female portion of the union-joint is attached; and to the other, a bulbous tube, about three inches in length, pierced with one, three, or five holes, according to the object

desired to be accomplished. The mode of using it is seen in the accompanying diagram, where *A* represents a vessel placed on a high shelf, or attached to the ceiling; *B*, a foot-pan, (a bidet may be used,) having a hard cushion, *C*, placed across it; *D* is the longer portion of the gutta percha tubing, armed at one extremity, *E*, with a leaden weight, and at the other with a portion of the union-joint, *F*; *G* is the shorter portion of the tube, armed with *H*, the opposite portion of the union-joint, and *I*, the vaginal bulbous tube. The patient, having placed the tube *D* in the vessel *A*, then takes her seat on the cushion *C*, and introduces the bulb *I*, holding *G* with the right hand. The left hand grasping *F*, conveys it to the mouth, and having made a slight inspiration, so as to exhaust about a foot of the tube, connects *F* with *H*, and the fluid contained in *A* flows into the passage, and is ultimately received in *B*.

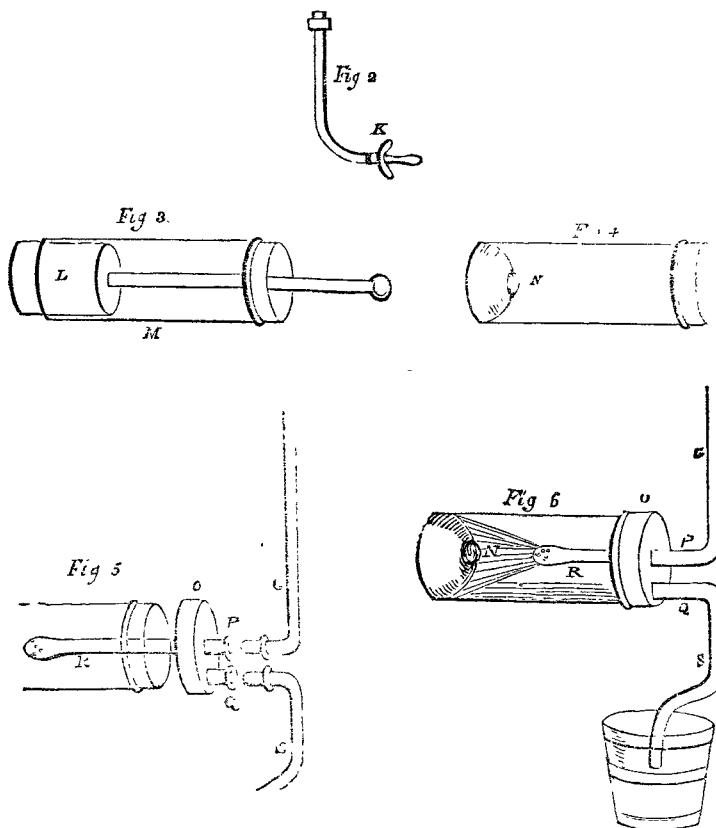
By the above simple contrivance is obtained, at a cost of two or three shillings, an apparatus admirably adapted for all the ordinary purposes of a female syringe, more especially in cases where frequent parturition has not produced a relaxed and dilated condition of the external passages; inasmuch as under the application



of cold, (i.e., when it is desirable to employ cold applications,) the orifice of the vagina contracts on the stem of *I*, below the bulb, and the fluid does not escape from the passage till after the (more or less) complete dilatation of the folds of mucous membrane, or until the muscular resistance of the orifice is overcome by the pressure of the falling column.

In cases of relaxation or dilatation, a shield, *K*, of the annexed form (fig. 2) is required, which takes the place of the bulb, *I*, (made also in gutta percha,) by pressing which against the external organs, the escape of the water from the passage is prevented, and the complete ablation of the folds of the membrane ensured.

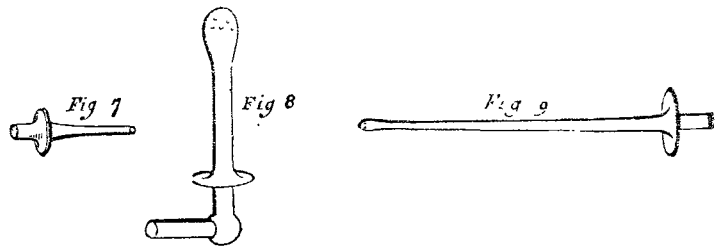
The Uterine Douche.—In more formidable cases, where disease is too far advanced to allow of the patient making use of the syphon syringe in the sitting position, or when it is deemed desirable to employ a jet of cold water as a douche, (in cases of chronic congestion of the cervix, &c.) the value of the contrivance is enhanced by combining therewith a round speculum, about five inches in length, and from one to two inches in diameter. In this case, the patient, placed on a sofa, or lying on a bed, the speculum *M*, fig. 3, guarded with



a boxwood plug, *L*, as in fig. 3, is introduced within the vagina, and if properly applied, on withdrawing the plug *L* the cervix *N* protrudes within its extremity, as in fig. 4. A cap, *O*, fig. 5, perforated with two holes, and having two sockets, *P* and *Q*, externally, and a tube, *R*, of about three inches in length, internally, is then applied. To the lower socket, *Q*, a tube, *S*, is applied, which may be conveyed to a vessel beneath the sofa or bedstead; and lastly, the tubes, *D*, *G*, fig. 1, being connected, exhausted, and applied to the upper socket, *P*, fig. 5, the fluid is conveyed to the cervix uteri, and returns by the lower tube to the vessel destined for its reception, as seen in fig. 6.

In this manner the douche may be continued for an indefinite period, without fatigue to the patient, or the escape of the fluid, except in its proper current; and on a future occasion, with permission, I shall have much pleasure in forwarding reports of cases wherein it has been of benefit.

Universal Injecting Apparatus.—To merit the title of a "universal" syringe, it is obvious that some further modification is required; but a little reflection will show, that by changing the form of the jet from *I*, fig. 1, it may be generally employed—e.g., an ear-tube, fig. 7, or an enema-tube, fig. 8, or a silver tube, some six or seven inches in length, fig. 9, may be applied, and by this means the cavity of the uterus may be injected, the meatus auditorius externus, or external ear, syringed, or an enema applied. It should, however, be observed, *en passant*, that for the purpose of enemata, the tubes *D* *G*, fig. 1, should be of greater length, so as to give the force of a higher column of water.



The last mentioned (fig. 9, a probe-pointed silver tube, attached to the tube *D*, fig. 1) will be found a most valuable means of conveying injections into the veins, should the system of throwing saline fluids into the blood in cases of cholera be again resorted to, because there will be a continuous stream, the force of which may be regulated by diminishing the height of the column, and in which it will be impossible for the smallest portion of air to enter the vein, and produce (as on a former occasion I witnessed) the sudden death of the patient.

I have submitted the apparatus to the inspection of Dr. James Blundell and Dr. Robert Lee, as well as to several medical friends, who are pleased with its simplicity, and satisfied of its utility, and I shall be happy to show it to any of my professional brethren who will honour me with a visit any forenoon. I have been advised to patent it, but I prefer, through the publicity of this widely-circulated journal, to throw it open to the public, and by so encouraging competition, to ensure to the afflicted, well-manufactured and efficient instruments at the lowest possible cost.

Orchard-street, Portman-square, Feb. 1849.

In a little printed treatise which Dr. Jones has forwarded to us, and which relates to the subject of this paper, the following passages occur:—

"As to its expense, nine feet of tubing of the size indicated if made of gutta percha, at two-pence per foot, will cost one shilling and sixpence; the leaden weight and bulbous tube cost sixpence; the union-joint, if made of box-wood, will cost three-pence, (any turner can make them), and thus at a cost of two shillings and three-pence, or allowing a fair profit to the manufacturer, at three shillings, or three shillings and sixpence, a most valuable instrument in promoting health, cleanliness, and comfort, and in the prevention of disease, is placed at the disposal of all who choose to employ it.

"For persons to whom a small sum of money is not an object of consideration, the gutta-percha tubing, and box-wood union-joint may be replaced by the elastic tubing and metal joints used by gas-fitters, inasmuch as the latter are more durable, and will bear a greater heat, and a stop-cock may be introduced. In the use of these instruments, three precautions are necessary to be observed:—First, never to employ fluid at a temperature much above blood heat; secondly, never to use it, except under medical direction, during the three first days of the catamenial period; thirdly, to take great care it is well cleansed after being used, before it is put away.

"Notwithstanding the smaller amount of mortality in females, it is nevertheless the fact, that a very large proportion of the diseases of women are entirely attributable to her sex, and on referring to the books of the charity with which I am connected, (the Free Hospital for Women and Children,) it is found that every third female applicant above the age of ten has suffered under some one or more of these affections either as cause, effect, or complication—viz., the diseases of puberty, pregnancy, child-birth, suckling, change of life, leucorrhœal or other discharges, accompanied by cancer, tumours, polypus, ulcerations, inflammations, congestions, or other abnormal modifications."

REMARKS ON AN ADDITIONAL MEANS OF TREATING LATERAL CURVATURE OF THE SPINE.

THE INVENTION OF THE DRS. BROWN, BOSTON, U.S.

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To the Editor of THE LANCET.

SIR,—The following observations, relating to a subject the pathology and treatment of which are acknowledged by the