

month. Her anxiety to become a mother, induced her to submit to an examination per vaginam, from the uncertain character of *external* signs. The fact was accordingly ascertained, and fifteen days after, abortion destroyed her sanguine expectations. The catamenia appeared regularly thrice afterwards, and ceased for two periods. At this time she consulted me on the probability of a second pregnancy. As she was in tolerably good health, I recommended her to waive the examination per vaginam, and await the period of quickening. At the end of the fourth month her health declined, and her anxiety became urgent until she entered the fifth month, when, in compliance with her earnest solicitations to decide the question, I ascertained the state of the uterus; it was full and tense, but I could detect no motion of a fœtus. The abdomen had enlarged in size, the mammæ were enlarged and hard, the areolæ extended considerably, and were of a dark brown colour; there existed, in fact, all the *external symptoms* of a *gravid uterus*; nevertheless, I pronounced her *not* pregnant. In this state she continued until the end of the *fifth* month, without feeling the child. Symptoms of chlorosis now became evident, which increased with her disappointment and anxiety, and the necessity of decisive measures for the restoration of the menses became every day more urgent. I resolved, therefore, to put in practice the plan recommended by Professor Lavagna, as described in THE LANCET. Accordingly, the patient was directed to inject *twenty drops* of the *liq. ammon. fortissimus*, night and morning, with two table-spoonfuls of *warm* milk, the bowels having been previously emptied by a mild aperient. The first application produced a slight degree of warmth in the vagina, which increased with each repetition; and after the fourth injection, distinct pain was felt indicative of uterine action, viz. in the lumbar region, and on the following morning the catamenia appeared. A dark grumous fluid was first discharged, attended with little pain. In six hours the menstrual flux succeeded, and continued to flow during two days, when it subsided, and finally ceased on the sixth day. The mammæ became flaccid, and the abdominal enlargement disappeared. The patient recovered sufficiently to conceive again three months afterwards, and in due season her hopes were crowned, and her anxiety rewarded by the birth of a fine full grown child, who, with the mother, enjoyed perfect health up to the present period.

Fulham, May 3, 1827.

A DESCRIPTION OF AN IMPROVED CUPPING-GLASS, WITH WHICH FROM FIVE TO EIGHT OUNCES OF BLOOD MAY BE DRAWN, WITH OBSERVATIONS.

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THIS Cupping-Glass is of the shape of a Florence flask, with a very short, curved, wide neck, the mouth being of the same diameter as the common cupping-glasses, viz. nearly two inches, so as to include the requisite number of scarifications; the neck so much curved, that when the mouth is applied to the skin, the oval belly of the glass hangs downwards, exactly like the body of the natural leech; from this similarity I call it "*The Glass Leech*."

It is advisable that each glass should be capable of holding from sixteen to twenty ounces of water; those hitherto made are each composed of about seven ounces of glass; this will convey a correct idea of their size and strength.

Mode of Application.—A piece of lint, four inches long and three-quarters of an inch wide, soaked with spirit of wine, is to be dropped *lighted* into the belly of the glass; or the soaked lint may first be put into the glass, and then lighted by a spill. (We use a piece of thin copper wire, slightly curved, of sufficient length to reach the bottom of the glass, with a portion of lint twisted and tied on to one end; this knob of lint is dipped into spirit and lighted by a taper, and with this the soaked lint is inflamed in the interior of the glass; this is the best and most elegant method.) When the flame is rather declining, (which will be the case in about a second after the lint has been lighted,) the mouth of the glass is to be applied to the skin, and the glass will fasten immediately.

Having applied the glass-leech for the purpose of dry-cupping, previous to scarifying, the lint does not require to be soaked again for the second rarefaction, but only has to be lighted afresh and the mouth of the glass applied over the scarified skin, when the blood will immediately begin to flow and stream down into the belly of the glass, not being liable to coagulate on the scarifications. It is frequently necessary to blow with the mouth into the glass, before the lint will light a second time, in consequence of the want of oxygen; by this simple operation the deteriorated air is exchanged for that of the atmosphere.

The mouths of several of these glasses

may be applied *close* to each other, the bellies hanging down, side by side, resting on the skin of the patient, and requiring no other support.

It is presumed, that the very superior and certain operation of these glasses depends upon the *largeness* of the space, which is rendered a partial vacuum by the rarefaction and after-contraction of the contained air; by the condensation of the oxygen during the combustion of the spirit, which continues for an instant after the application of the glass; and by the condensation of the aqueous vapour formed by the burning of the spirit of wine. If the mouth of any cupping-glass be plunged into water, after the interior has been rarefied in the usual way, the glass will become about half filled by the pressure of the atmosphere; the partial vacuum is therefore equal *in degree* whether the glass be large or small.

When a four-ounce glass is used, *the skin* forced in at the mouth will re-fill and destroy the effect of the partial vacuum, *four times as much* as if the cupping-glass had been capable of holding sixteen ounces; and as the quantity of *skin* projecting into the glass occupies at least half an ounce of space, the *efficient* pressure of the atmosphere *will only be the same*. When the four-ounce glass is first fixed on the skin, as it would be with a sixteen-ounce glass, after one ounce and a half of blood had flowed, which, with the half-ounce space occupied by the skin, would be two ounces, the interior of each glass being therefore filled one-eighth part. When half an ounce of blood had entered the four-ounce glass, the atmospheric effect would be the same as when three ounces and a half had flowed into the one of sixteen ounces. With one ounce of blood, in the four ounce, the same effect would be produced by the atmosphere as when there were five ounces and a half of blood in the sixteen-ounce glass, and so on in the same proportion.

From these considerations, confirmed by experience, it is obvious that a large cupping-glass acts with greater advantage from the first moment of its application, and what is equally important, the force diminishes more slowly as the blood flows into it, than when a small glass is used; one of four ounces must be removed when it has received one ounce and a half of blood, as the equilibrium will then be restored between the air within and the atmosphere without; but seven or eight ounces of blood will flow into one of sixteen ounces before the atmosphere ceases to be efficient.

It is evident from the size and shape of the glass-leech, that it may be applied before the flame is completely extinguished without burning the skin, by which the partial vacuum is secured, being as good as

possible. Another *great convenience* is, that after the scarifications have been made, and the proper number of glasses applied, the operator may leave the patient to the care of any attendant, who may remove the glasses when sufficiently filled with blood. It has been found that each glass will draw at least five ounces of blood, taking the average of a number of trials.

These *glass-leeches* are constantly used in the Derbyshire General Infirmary, and are highly approved of after several months experience of their superiority over every other cupping apparatus, and at the same time that they act with certainty and expedition, the attendance of the operator only being necessary to set them on; they require far less expertness than the common cupping-glasses for their successful application.

DOUBTS ON MEDICAL SUBJECTS.

Doubt the First.—Whether the changes said to be now contemplated in the discipline of the Scotch Universities, in regard to medical education, deserve to be considered as improvements, or to be deprecated as tending to render that species of instruction less efficient, and to view these seminaries as schools of physic?

To the Editor of THE LANCET.

London, 10th May, 1827.

SIR,—At a period when a thorough conviction seems to pervade the public mind that great changes are wanted in this country, whether in regard to the state of the different branches of the medical profession, or to medical education itself; and when, by a rare and curious concurrence of circumstances, an inquisitorial investigation into the affairs of the Scotch Universities has sprung up by their own seeking, it must be of essential importance to inquire, before the meditated innovations be carried into effect, whether they be of the nature of real improvements, founded on experience, or the result of speculation, tending more probably to render medical instruction less efficient, and to ruin our northern seminaries as schools of physic. The subject, even in the shape of doubts, is of fearful interest, and I approach it with a species of awe. Yet I regard the discussion as an imperative duty.

In No. 181 of THE LANCET, you were pleased to insert a Letter from me on the art of advancing backwards, containing some strictures on the origin, object, and probable operation of the Royal Commission,