course; and the ward walls are double, with an air space inside to save heat and keep out damp. There is only one staircase, in the centre of the building, between the administrative corridor and the ward corridor adjoining the library and chapel, and a subsidiary staircase at one end.

The discussion on principles of hospital construction in the present and preceding papers contains the result of long experience, and may afford the means of avoiding recent errors of plan. But in concluding them it is necessary to end, as we began, with the observation that all a hospital architect can do is to place at the disposal of the hospital authorities a building in the plan of which he has endeavoured to embody healthy principles of construction. By so doing he has simplified all the problems connected with the hygiene of sick and injured patients, but he has not abolished these problems.

It has happened in some cases that the less perfectly constructed building has afforded better results in practice than the more perfect building, simply because the general management of the former has been better. Cleanliness has been more carefully maintained, and perhaps also the medical and surgical management of the patients has been better, in the former than in the latter.

A large general hospital, under any circumstances, is a complicated building, requiring knowledge and care in its administration. On going over many buildings of this class, we may find as many principles of management as there are buildings. We may find windows open in one hospital, or in one set of wards under one medical man, and closed in those in charge of another. Ventilators sealed up in one and open in another. Very different ideas of cleanliness and neatness appear to prevail in different hospitals, and even in the same hospital one ward may be well aired and another foul. It would be advantageous to have clear directions for the sanitary management of large hospitals drawn up, and a special officer should be appointed to see that they are put in execution.

In army general hospitals a sanitary officer is required to be appointed (he may be principal medical officer), whose duty it is "to see that the hospital is preserved in a good sanitary condition, and to report immediately to the governor, through the principal medical officer, all defects in drainage, waterclosets, water-supply, ventilating arrangements, cleanliness both without and within the hospital, as well as any other sanitary defects which cannot be remedied in conformity with instructions given by the sanitary officer on the spot; and he shall see that such defects are effectually remedied."*

No one who has been in many large hospitals can have failed to find sufficient employment for an officer of this class. In a large faulty general hospital a sanitary officer would do much good; but his presence would also be advantageous in every large hospital.

* New Army Medical Regulations, 1859.

FAREWELL SUPPER.—On Monday evening the resident assistant-surgeons and physicians of the Glasgow Royal Infirmary, with a few other gentlemen, entertained Dr. W. H. H. Strother, on the occasion of his leaving the Infirmary for the south of England. The chair was filled by Dr. W. J. Scott, the position of croupier being occupied by Mr. Hilliard. The chairman, in proposing the toast of the evening, spoke at some length of the numerous good qualities found in the character of Dr. Strother, and expressed his own and others' regret at the departure of their guest. In his reply that gentleman referred in very feeling terms to the great kindness he had experienced while in Glasgow, which made the prospect of leave-taking painful in the extreme.

Correspondence.

"Andi alteram partem."

THE OVULAR THEORY OF MENSTRUATION.

To the Editor of THE LANCET.

SIR,—In the present number of the *Archives de Physiologie*, Dr. Kronid Slavianski, of St. Petersburg, in an article on the Graafian vesicles of the human female, submits the following propositions:—

"I have proved the existence, almost without exception, of Graafian vesicles visible to the naked eye in young females from the age of one week up to the time of puberty. These vesicles, under the microscope, appear more or less mature, and cannot be distinguished from those which are met with in the ovaries of adult females." "That which proves that the existence of the Graafian vesicles in the ovaries of infants is not an accidental phenomenon is that they are always present." "It is therefore necessary to admit that from the earliest times after birth Graafian vesicles are developed in the ovaries, these vesicles having all the appearance of those met with in the ovaries of adult females. Consequently the functions of the ovary (the maturation of the vesicles) are carried on, not only in adult women, but also before menstruation, and even in infancy." "That there are other causes than menstruation which produce the rupture of the Graafian vesicles, and the expulsion of their contents, is proved in the case of women becoming pregnant before menstruation has commenced." "That the development and the maturation of the Graafian vesicles do not take place in any regular periodical manner, and that there is no connexion between their condition and menstruation." "Menstruation is a physiological phenomenon entirely independent of the development and maturation of the vesicles."

Dr. Slavianski proceeds to mention several authors, the dates of whose works range between 1865 and 1873, in support of the above statements, and cites from Dr. Beigel* the histories of cases in which the removal of both ovaries in ovariectomy had not arrested the regular recurrence of menstruation. In the year 1849 my father published in the late *London Medical Gazette* a paper entitled "An Examination into the Grounds of the Ovular Theory of Menstruation"; in which, after mentioning Dr. Ritchie's researches to the same purport, published in vols. 33, 34, and 35 of the *London Medical Gazette*, he concludes as follows:—

"The examination, then, of the so-called theory failing to exhibit the grounds of other than an ingenious hypothesis, the actual state of our knowledge of the nature of menstruation may be expressed in the following propositions, whence it will appear that the 'ovular theory' has not added much to our previous information:—

- "1. Menstruation is a *periodical* function of the uterus.
- "2. Ovulation is the *constant* function of the ovaries.
- "3. Ova are matured in the ovaries at all ages, but more rapidly during menstrual life.
- "4. Ova are discharged at all periods of female life, in the intervals of, as well as at the time of menstruation.
- "5. Ovulation and menstruation being often concurrent indicates that they are both the result of the attainment of a certain point in the development of the female economy.
- "6. The law of periodicity in the one not obtaining in the other leaves still wanting the link in the chain of causation whereby menstruation can be shown to be the effect of ovulation.

"7. At the menstrual period the ovaries experience an extension of the uterine congestion, and become, equally with the uterus, the seat of increased functional activity.

"8. The menstrual flow is a true hæmorrhage, as shown by chemical analysis and by the phenomena of disease."

From the above quotations it will be seen that neither Dr. Slavianski nor Dr. Beigel is the first to contest the idea that the function of menstruation is due to the discharge of ova.

The ovular theory is, however, still the accepted doctrine taught in our handbooks of physiology.

I remain, Sir, yours faithfully,

May 26th, 1874.

W. HENRY KESTEVEN.

* Ueber der Verhältnisse der Menstruation zur Ovulation; Wiener Med. Wochens., 1873.