directly upwards, so as to make an opening just round the superior border of the cornea. No sooner was the incision completed, which was instantaneously effected, than the opaque crystalline escaped, and that without any pressure or any attempt to puncture the capsule having been made. A rather free discharge of vitreous humor accompanied the escape of the cataract. Strips of adhesive plaster were therefore applied to the eyelids before proceeding to the operation on the other eye. The same operation was then performed on the right eye with precisely the same result, the lens immediately following the knife, and there being a still freer discharge of vitreous humor. Plaster strips were then applied to the eyelids. A draught, containing forty drops of laudanum, was given immediately, and another with thirty drops ordered to be repeated at bed time. He was afterwards carefully removed to bed.

2. Had slept well during the night, not having experienced much pain. The external appearance of the eyes was favorable, and the dressings were therefore not removed. The anodyne ordered to be repeated at bed-time.

3. The plasters were this morning removed, the conjunctiva of both eyes was very vascular, but the cornea perfectly clean; the patient had a very vivid perception of light and not much pain, but the eyes were very watery. Repeat the draughts at night.

4. Much the same as yesterday, and could distinguish surrounding objects with both eyes. Plaster dressing to be continued, and to take a purgative pill to-night.

7. Going on favorably; complained of some irritation on exposure to light, but of very little pain; the conjunctiva continued very vascular, but the cornea was perfectly transparent in each eye. The plasters were ordered to be discontinued, and, instead, to apply a thin fold of linen, dipped in warm water, to the surface of the palpebræ; a purgative pill to be taken occasionally.

13. Considerable irritation was still experienced in both eyes, the conjunctiva continuing very vascular, but the cornea quite clear. On closely examining the eyes, the wound of the cornea of the left appeared quite smooth and completely cicatrised, whilst that of the right was somewhat irregular and appeared to be healing by granulation. Vision was improving, and he could bear exposure to light rather better; his general health was not much impaired, and the bowels had been kept free. A blister was ordered to the nape of the neck, to be kept open for a few days, and the warm water bath to be used frequently to the eyes.

22. The vascularity was now materially diminished; the lachrymation, intolerance of light, and other symptoms of irritation abated; vision improved; and, on the whole, the patient considered to be going on exceedingly well.

May 2. The eyes had now so far recovered from the effects of the operation that it was not deemed necessary to detain him any longer in the house; he accordingly returned home, having regained excellent vision, and being able, with optical aid, to read with facility.

The details here given clearly prove that the expulsion of the lens immediately after the completion

of the incision, even when followed by a rather copious discharge of vitreous humor, is not necessarily followed by any unpleasant result, since nothing could be more favorable than the progress and termination of this case.

OBSERVATIONS

ON THE MICROSCOPIC CHARACTERS AND MANNER OF DEVELOPMENT OF THE BLOOD CORPUSCLES.

By Dr. MARTIN BARRY.

Dr. Martin Barry, in a paper read before the Royal Society, has thus described the development of the blood corpuscle:—"1. The mammiferous blood corpuscle, like one of the cells of the ovum, is at first a disc, or what is now called a 'cytoblast'—i. e., a cell-germ. It is now a flattened vesicle or cell; like other cells or cytoblasts, however, it may and does become a cell, but then it is no longer flat. In the blood disc you see a central, colorless, concave portion, around which lies the red coloring matter.

2. As usually met with the blood disc is *round*, with the exception of the two or three instances, in which, from the observations of Mandl in France, and Gulliver in this country, it has been discovered to be *elliptical*. I have since found that even in mammals, where the blood disc is usually met with round, *its original form is elliptical*. I have seen this to be the original form of the blood disc in man.

3. The discs first become round, continuing flat; subsequently, they pass into an orange shape; and, lastly, become globules. They also very much increase in size.

4. Along with these alterations in the form and size of the blood discs, there takes place another change; instead of a mere concavity, there is now seen a colorless, pellucid, semifluid substance, which, as the corpuscle becomes orange-shaped, is found to be, not in the centre, but on *one side*. It is the nucleus of the corpuscle, the corpuscle itself having become a cell. This pellucid substance, or nucleus, divides into and gives off globules. Each globule, appropriating to itself new matter, becomes a disc; and each disc, undergoing changes like the first, gives origin to other discs, a group of which constitutes the colorless corpuscle of the blood, for with the changes now mentioned the red coloring matter is consumed.

Thus, as the red pass into the colorless corpuscles, there must exist all intermediate stages; between them no line of distinction can be drawn.*

5. The corpuscles of the blood are propagated by means of parent cells—a parent cell has its origin in a colorless corpuscle, this colorless corpuscle being an altered disc. As the parent cell is forming, the new discs within it gradually become red, and are at

* "The colorless corpuscles in other vertebrata, for instance, the batrachians, being much smaller than their red corpuscles, cannot be these red corpuscles in an altered state, nor is any such change to be expected here. The red corpuscles usually seen circulating in these animals are not, as in mammalia, *discs*, but *nucleated cells*. Some of these nucleated cells, however, give origin to discs, having very much the same form, size, and general appearance as the blood discs of the mammalia. In the frog I saw such *discs* passing into the state of colorless globules, which, acted on by acetic acid, presented just the same appearance as the colorless corpuscles of the human subject."

length liberated to give origin in like manner to new discs, or to be appropriated in some other way.

6. From observation 4 it will be seen that the disc, or so called cytoblast, is originally a pellucid globule, which globules, therefore, is the true cell-germ.

7. Sometimes the quantity of the pellucid substance in the blood cell is very much increased. This takes place at the expense of the red coloring matter which surrounds it. The blood corpuscles, now cells, I have seen in various parts collected until the capillaries were completely filled with them, and until they had become pressed together into many-sided objects.

8. The originally colorless substance derived from the nuclei of the blood cells and nearly filling the capillaries, as I have found it, appears to constitute the essential part of coagulable lymph to organise the same, and to give origin to the tissues, &c. It seems to be this same colorless substance derived from the nuclei of the blood cells that forms the exudation, corpuscles of authors, the fibres of false membrane, and the filaments in coagulating blood—filaments which, as I have shown, here and there arise while this substance is still within the cells.—*Phil. Mag.*

REGISTRATION OF DEATHS.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—I shall feel much obliged if you will inform the readers of the Provincial Medical Journal that the Registrar-General has recently given the following directions to the registrars of deaths:—

“When the information given to you by the medical attendants upon deceased persons, respecting the ‘cause of death,’ contains also a statement of the *duration of the fatal diseases*, or is accompanied by the memorandum ‘(p. mort)’ denoting that the nature of the causes of death had been ascertained or verified by a *post-mortem* examination, you will not fail to enter these statements in the column of the register, headed ‘cause of death.’”

It is desirable on many accounts that the laws respecting the duration of diseases should be ascertained, and this will afford the medical profession an opportunity of entering on permanent records a sufficient number of observations for determining those laws as well as the laws of mortality.

With regard to the registration of the “causes of death,” it has been found the most convenient and satisfactory course for the medical attendant to leave a written certificate with the friends of the deceased person, to be placed in the hands of the registrar.

The registrar is directed to ask the informant whether any written statement of the cause of death has been left by the medical attendant; but the relatives, from the natural distraction of grief, or ignorance of its scientific importance, are apt to forget the medical certificate, unless the medical attendant take the trouble to state that it will be required, and place it in their hands.

If the medical profession needed any stimulus to induce them to contribute to the promotion of medical science, or to the discovery and consequent removal of the causes of untimely death, it will be found in

the following considerations, to which the Registrar-General has adverted in his last report:—

“I hope that the members of the medical profession, who have hitherto given their aid, will cordially assist in carrying out this national registration of the causes of death, as they alone are able to give a correct statement of the nature of the fatal diseases; and to them, more than to the members of any other profession, must be apparent the vast importance of thus collecting accurate materials for advancing the science of vital statistics.”

Copies of the “Statistical Nosology, with notes and observations for the use of those who return the causes of death,” may be procured by any medical practitioner, upon application (verbal or written) at the General Register-office.

I have the honor to be, Gentlemen,

Your obedient servant,

WILLIAM FARR.

General Register-office, May 6, 1843.

PROPOSED PLAN FOR REGISTRATION OF DEATHS.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—I beg to forward to you the following correspondence with the Registrar-General upon the subject of registration of deaths.

My object in requesting a place in your Journal for these letters is, that of calling the attention of my professional brethren throughout the kingdom to the great importance of adopting one or other of the proposed plans, so as to ensure a correct return in every instance of the actual cause of death.

The plan mentioned by the Registrar-General would be all-sufficient, if it could be relied upon, which it cannot. At all events it is quite clear that the returns, as at present made, are of trifling value compared with that which would be attached to them were the sources of information derived from the right quarter; and I hope you will join with me in calling upon my professional brethren to assist in this great national undertaking.

I am, Gentlemen,

Your obedient servant,

C. R. BREE.

Stowmarket, May 9, 1843.

(Copy.)

Stowmarket, May 6, 1843.

Sir,—In your fourth Annual Report I find an article upon Statistical Nosology, in which a list of various names of diseases returned to you as the causes of death is inserted. This article, published in a separate form, has been kindly sent me by the deputy registrar of this town, and I presume has been done to other medical men, under the impression that these terms have been returned by them as the cause of death. For the honor of the medical profession I have no hesitation in stating that such returns were never made by its members. You will not, I am sure, Sir, consider this a bold assertion, when I state that I have very rarely indeed been applied to, to supply the registrar with the cause of death. In the district