are delivered in the medical schools of Great Britain and Ireland." You say: "Systematic lectures are delivered in every medical school in the United Kingdom; and it is difficult to believe that the translator could have been unacquainted with the fact." Now, I do not admit that it is the duty of a mere translator to correct all the errors of the original, and, as a matter of fact, I have, I think, only once put the author right (at p. 109); but I do not admit the author to be wrong in his assertion. Looking through the *Medical Directory* for this year, I find that eleven medical schools make no provision whatever for ophthalmological instruction, and I doubt very much if the "Ophthalmic Demonstrations," "Clinical Lectures on Diseases of the Eye," "Ophthalmic Surgery," &c., advertised at many of the other schools, would properly come under the head of Dr. Fuchs's "regular lectures," or the "systematic lectures" you speak of. As it is upwards of forty years since I was a student at a medical school, I may of course be mistaken respecting the present state of ophthalmologic education in this country; at all events, I had not any knowledge of an opposite state of things which would have enabled me to say that Dr. Fuchs was wrong in saying that "as a rule no regular lectures on ophthalmology are delivered" in our medical schools, and the facts I have given above seem to prove that "regular lectures" on ophthalmic medicine are still the exception in the medical schools of the United Kingdom.

R. E. DUDGEON

53, Montagu Square, November 4

[We have referred Dr. Dudgeon's letter to the writer, who replies as follows:—

Dr. Dudgeon's letter will not bear a moment's examination.

In the first place he misstates what he calls the "first accusation." He was not accused of "often" rendering "Augenheilkunde" by "Ophthalmology," but of having done so in one particular place, in which the effect of the mistranslation was to give a certain amount of colour to a statement which, in the original, was wholly untrue.

It is obvious that "Ophthalmology" is neither English, French, nor German. It is common to all three, and the forms of it differ only in termination. "Ophthalmologie" should be rendered by "ophthalmology," and *vice versa*. Its meaning embraces everything appertaining to the eyes, and its German equivalent is "Augenlehre."

"Augenheilkunde," on the other hand, is a word of limited significance, the meaning of which embraces only the treatment of affections of the eyes. Dr. Dudgeon's suggested rendering, "Ophthalmic Medicine," is so far inadequate that it might not be understood to include surgery, and it could hardly be understood to include the use of optical appliances. "Augenheilkunde" forms part of ophthalmology, an important part indeed, but a part only.

Dr. Fuchs asserted that, "as a rule, no regular lectures on 'Augenheilkunde' were delivered in the medical schools of Great Britain and Ireland." This assertion, very possibly made in honest ignorance, is absolutely the reverse of the truth. Dr. Dudgeon altered it into the statement that "no regular lectures on ophthalmology" were so delivered. This, in a sense, is true; because the lectures, which cover the whole extent of "Augenheilkunde," neither cover, nor attempt to cover, "ophthalmology."

I do not think it is too much to expect that a translator shall correct a misstatement in the original work, especially when that misstatement is one which casts a wholly unmerited stigma upon the institutions of the translator's native country. Instead of correcting it, Dr. Dudgeon casts it into an altered form, in which it may be said to be true literally, although calculated to produce an entirely erroneous impression upon the reader.

Dr. Dudgeon must not go to the extremely condensed statements of the *Medical Directory* for complete accounts of the work done by British Schools of Medicine, but to the prospectuses of the schools themselves. There are thirteen such schools in London, and regular lectures on "Augenheilkunde" are delivered at all of them; at Bartholomew's by Messrs. Power and Vernon; at Guy's by Mr. Higgins and Dr. Brailey; at King's College by Mr. MacHardy; at the London by Mr. Waren Tay; at the Middlesex by Mr. Lang; at St. George's by Mr. Brudenell Carter and Mr. Frost; at St. Mary's by Mr. Critchett; at St. Thomas's by Mr. Nettleship; at University College by Mr. Tweedy; at the Westminster by Mr. Cowell; at the West London by Mr. Vernon; at the School of Medicine for Women by Mr. Mackinlay. At Charing Cross the lectures

are delivered by arrangement with the staff of the adjacent Westminster Ophthalmic Hospital. It would be tedious to enter into particulars with regard to the provincial, Scotch, and Irish schools, but similar lectures are delivered in all of them.]

The Helm Wind

THE *helm wind* of Cumberland has been the subject of much discussion in England. I wonder how the true explanation has not been found, viz. that the *helm wind* is a *bora*, i.e. identical in character with the extremely strong dry east and north-east winds blowing on the coasts of Istria and Dalmatia, as well as on the north part of the east coast of the Black Sea, especially at Novorossiisk. At the latter place it blows from the Varada chain, about 2000 feet high, and, as with the *helm wind*, it is not felt a little distance to the east. I give the translation of a passage on the *bora* in my book on "The Climates of the World":—

"Seamen call the *bora* an *air-waterfall*. There is reason to believe that it begins when the stable equilibrium between the air-strata on the mountain and the bay is disturbed, i.e. when the latter is more than 10° warmer than the former. The Varada chain falls in a gentle slope eastward towards the broad Adegoa valley, to the north-east of which is the Svinzovy (Lead) chain. In this walled-in valley the temperature is much lower than on the coast, especially in winter and autumn, and when the cold air fills it to overflowing there arises an unstable equilibrium towards the west, and the colder it is on the mountain in comparison to the bay, the stronger is the reaction, i.e. the *bora*."

Here also the *bora* may arise, not only on account of a strong local cooling of the air in the Adegoa valley, but also accompany general north-east winds to the north of the Caucasian chain. They bring cold air from afar, are sometimes prevented by the Varada chain from sinking to the sea-level, and during this time the equilibrium is disturbed and they appear as *bora*, even if they blow as gentle farther to the east.

I have no doubt the English *helm wind* is also due to a disturbed equilibrium. The east is colder than the west, and the contrast is stronger when east winds blow, i.e. local radiation makes the east yet colder, and in short a difference of temperature of about 14° is likely to occur between the Cross Fell Range and the Penrith valley. In summer the wind is not felt—the west being then colder than the east; and it is less frequent in winter than in November, March, and April, because the prevailing west winds and the cloudy weather which necessarily accompanies them equalise the temperature.

St. Petersburg, October 19 [31]

A. WOEIKOF

The Resting Position of Oysters

THE evidence adduced by Mr. Cunningham to prove that oysters rest on the right or flat valve in their natural state seems conclusive. Remembering, however, that I possessed a young oyster-shell detached from a sandstone rock years ago on the coast of Arran, I turned to it, and was surprised to find that the lower or attached valve was unmistakably the larger, overlapping the other at the hinge and all round. I have another single valve of some foreign species taken from a *Haliotis* shell, which furnishes similar evidence. Apparently, therefore, in the young or attached state it is the larger or convex valve which is the lower, and probably this is the evidence on which the ordinary statement in conchological books rests. It will be curious if the truth turns out to be that the oyster changes its position when it becomes unattached. Perhaps the remarkable inequalities in the shape of the convex valves may arise from the inequalities in the objects to which they are originally fixed.

W. TURNER

27, Queen's Crescent, Edinburgh

The Australian Lyre Bird

HAVING been stationed at intervals for some years on the mountains of Eastern Manaro, in the southern part of New South Wales, the habitat of the Lyre Bird or Native Pheasant (*Menura superba* or *Paradisæa*), I have thought some fuller particulars regarding its habits, than are usually obtainable, might be interesting to your readers.

This range of mountains, the more sheltered sides of which form the home of these interesting birds, attains a height of over 4000 feet above sea level. The sides, sloping towards the coast at a general angle of about 45°, are heavily timbered with

eucalypti, wattle, and musk trees, and covered with a dense undergrowth of ferns and creepers, the gullies being filled with tree ferns. Generally speaking there is a noticeable absence of game, but at certain seasons the forest resounds with the varied cries of the male lyre bird. The hen builds her nest at the foot of a trunk of a tree, of twigs and bark, lining it with dried ferns and grass, and leaving an opening in the front of the top. Herein she deposits the *one* egg on which she sits to incubation (for, as an Irish friend said, "she only lays one egg at a time"), leaving the nest daily for food. The country abounds in the hills of ants, from those of the large bull-dog ant, an inch long, to those of a small black variety, and it is upon these insects and their larvæ that the lyre bird chiefly subsists. The bird is of a sooty black colour, with a body somewhat larger than that of a pigeon, but has a tail of graceful form and beautifully marked. Ordinarily, this tail is simply carried behind like a peacock's in repose, but if found upon their "dancing beds" with head erect and tail expanded over the back they are decidedly handsome. These "dancing beds" are patches of comparatively clear ground, from one to two yards in diameter, with the ferns trodden smoothly upon the surface, upon which the birds assemble, and dance and strut to their apparent great delight. The original cry or call of the lyre bird is a very simple one, but his adopted one partakes of that of every sound he hears; for he is a most wonderful mocker, not only of other birds, such as the parrot, cockatoo, yang yang, or magpie, but he will imitate, to the life, the bullock driver with his whip, the step of the teamster's horses, the rasping of the cross-cut saw, and the blows of the axe and tomahawk, and more wonderful still, more than one of these at the same time, so that the solitary explorer is led to believe he has suddenly come upon pioneers of civilisation in the heart of the forest.

The male bird is exceedingly pugnacious, and this fact is made use of by the settlers to his destruction, for his tail is worth \$3. By imitating one of his prominent calls, the hunter can lure him within gun-shot, although naturally very shy; he comes to repel a fancied intruder into his domain. His flesh is very dark-coloured and coarse, and only used as food in cases of necessity. Many attempts have been made to rear the birds in captivity, and there is a report that *one* has been successful. With this exception, which I cannot authenticate, I never heard of any result but failure.

The sound of his call so alters in proportion as his tail is in full feather or indifferently ornamented, that hunters can judge from that whether or no any individual bird is worth pursuit.

My apology for asking for so much of your valuable space must be in the fact that until I set myself the task of getting the above information, I could not obtain it from published accounts.

ALFRED MORRIS

Railway Survey Camp, Manaro, New South Wales,
September 1

Blackberry Blossoms in November

I HAVE this day seen blackberry blossoms in a hedge on this road, and yet the autumn has been rainy and inclement.

JOSEPH JOHN MURPHY

Osborne Park, Belfast, November 10

EXPLORATIONS IN PAHANG

PAHANG is a small state in the Malay peninsula on the eastern side of the dividing range, with a coast-line on the China Sea. The territory is almost exclusively occupied by Malays, who live on the banks of the rivers; but in the unexplored forests of the interior near the mountains there are a few tribes of wild aboriginal Sakeis. Though Pekan, the capital, is not quite 200 miles from Singapore, it is rarely visited by Europeans. It is situated at the mouth of the river Pahang, and on this stream the bulk of the population is to be found. The Pahang is the main artery of communication with the interior. Its course is inaccurately laid down on the map published by the Straits Government in 1879. Quite recently, however, Mr. W. Cameron, a surveyor, has by his own efforts, unassisted by the Government, mapped the whole course of the stream, and his map, not yet published, is in the hands of the Straits branch of the Royal

Asiatic Society. Recently also the river was ascended by Mr. G. Scaife. He went up by the Semanten River and one of its tributaries to the dividing range, and then, accompanied by Malays only, he crossed to Klang, in Selangor, in three days, and so reached the western coast. In May of this year Mr. Swettenham, the Government Resident in Selangor, succeeded in passing the dividing range from Perak by ascending the River Slim. Having descended on the eastern side of the mountains he reached the Lipis River, down which he came on rafts to the Pahang, and so on to Pekan. The whole journey occupied one month.

It may seem strange that a territory so near Singapore should be so little known. The reasons for this are that on the land side its jungles and forests are very inaccessible, and that for six months of the year, when the north-east monsoon is blowing, the rivers and coast-line can scarcely be approached from the sea. Pahang has always had a peculiar interest because of the large and rich gold mines said to exist within its limits. Curious specimens of nuggets are constantly reaching the British settlements from this locality.

In July last I started from Singapore with the intention of seeing some of the gold fields and generally to examine the geology of the river and some of its tributaries. I was accompanied by Mr. H. G. James and Mr. Scaife. A small steam launch had been sent on previously, and we hoped by its means to save time and the inconvenience of depending on native boatmen.

Pekan, the capital, lies about six miles above the mouth of the river. It is a small town of perhaps 1500 inhabitants. It is well laid out in rectangular grassy streets. The sides of these are formed of high betane fences, within which, buried in tropical foliage, are the detached bungalows of the inhabitants; the houses are built high off the ground with attop roofs. There is one street of wretched Chinese shops called the market. In the midst of this is a somewhat pretentious two-story palace for the Sultan. Close by are many sheds built for games for royal diversion, amid which is a conspicuous inclosure covered in, where for many hours almost daily his Highness plays at top-spinning with his nobility and gentry.

He received us courteously at midnight (a common hour for receptions) and seemed quite pleased to have his country visited by Europeans. He gave us a letter commanding all chiefs (Datus) to give us any help we might require. He does not affect any royal splendour, but is very simple in his habits. He is a liberal-minded man, who might do much but for his indolence.

We started with a party of thirteen in a large river prahm, in case the launch should fail us, which it promptly did. Though only drawing 2 feet 8 inches we lost four days in advancing fifteen miles. At last the shallows stopped us altogether, and we had to take to the prahm. The Pahang drains an immense basin and is fed by innumerable tributaries, so that it is rather disappointing to find that unless in times of flood it is only navigable for the small prahm of the Malay. The largest of these scarcely draws two feet of water.

The channel is from 300 to 600 yards wide, interrupted continually by jungle islands and large sandbanks. On the latter pea-fowl (*Pavo javanicus*) are commonly seen. The banks are lined at intervals with small villages. They may be known at a distance by the clumps of cocoanut and betel palm. On our approach we frequently heard the wooden gong or drum echoing with singular clearness through the forest. It reminded one of what Stanley tells us of the River Congo, except that the Pahang natives are very peaceable. The vegetation was of the usual Malay character. The common trees were Ficus, Phyllanthus, Vitex, Castanopsis, Garcinia, Dipterocarpus, Fagrea, Hibiscus, &c., with creepers and vines innumerable, especially Bauhinia, Vitis, Ipomæa, Entada,