Leptomitus lacteus (Roth.) Agardh.
**Rhipidium europæum* von Minden.
**Rhipidium americanum* Humphrey.
Blastocladia Pringsheimii Reinsch.

Further investigations are in progress and it is hoped before long to publish a full account of the work which has been done.

W. R. IVIMEY-COOK.

University College of South Wales
 and Monmouthshire.

E. J. FORBES.

University of Bristol.
 Sept. 16.

Diagnosis of a Nervous Disease by Sound Tracks

SPEECH registrations have been used for many years in diagnosing nervous diseases at the West End Hospital for Nervous Diseases, London. Quite

shaky in their co-ordination. The condition is known as *ataxia*. The irregularity of the intervals is a registration of laryngeal ataxia. No abnormality could be observed by the ear in the speech of these patients. The film track test is thus ultra-acoustic.

Registrations of speech by the macrophonic—or graphic—method² in several hundreds of cases of disseminated sclerosis have shown that the ataxic waves are never absent. They are present also in other diseases that produce laryngeal ataxia, such as Friedreich's ataxia, cerebellar tumour, etc. These troubles are, however, never confused clinically with disseminated sclerosis.

The use of sound tracks for diagnosis is not impracticable. At present the patient must be taken to a film studio. The making of a registration requires only a few minutes. The film is ready for delivery on the following day. The Stoll studios at Cricklewood were generous enough to charge for the cost of the

film only. It would be quite feasible to arrange for recording over the telephone system from a hospital to a studio.

F. JANVRIN.

73 Welbeck Street,
 London, W.1.

¹ Janvrin and Worster-Drought, "Diagnosis of Disseminated Sclerosis by Graphic Registration and Film Tracks", *Lancet*, p. 1384; Dec. 24, 1932.

² NATURE, 132, 138, July 22, 1933.

FIG. 1.

FIG. 2.

FIG. 3.

recently the method of registration on sound films has been introduced¹. Fig. 1 is the sound track of the vowel *ah* made at a film studio from a normal voice. It shows the vowel *ah* to consist of a series of short portions each of which begins with a sharp upward jerk. The upward jerk is the result of a jet of air from the glottis. The distance from one upward jerk to the next gives the period of the laryngeal action. The period changes slowly and never suddenly. This means that the muscles controlling the tension for the laryngeal action are well co-ordinated. Such a condition is known as *eutaxia*.

Figs. 2 and 3 are sound tracks of the vowel *ah* registered by patients known to be cases of disseminated sclerosis. The upward jerks follow one another at irregular intervals. The first one stands alone, far in advance of the others. The intervals for the following ones vary from long to short. This indicates that the muscles governing the laryngeal action were

regeneration experiments. Specimens were collected by Prof. Renouf and myself from a locality at Baltimore where many of the worms are exposed at low spring-tides. With the worms collected late in July, practically all the fragments isolated for experiments died within a few days. A visit at the next spring-tide a fortnight later revealed the fact that a number of the worms, both those which were submerged and even some of those which were out of the water, had their tentacles protruded from their tubes, and many of these showed very sluggish reactions on being touched. On this occasion, too, there was a great mortality among the operated pieces, in strong contrast to the excellent viability reported by Berrill¹ and found by myself in June in specimens sent to London from Plymouth.

Some specimens, however, at this and at the next spring-tide appeared to be normal in their reactions,

Biological Effects of Abnormal Weather

WITH reference to Prof. Orton's letter in NATURE of September 9, a recent experience of my own may be interesting. Working at the Marine Laboratory at Lough Ine, County Cork, this summer I had occasion to use the common *Sabella pavonina* for