or practically zero when a monochromatic blue or green filter is used. The only precaution necessary is to cut out the extra resistance when starting up, as the arc tends to strike on to the ioniser spiral.

By using a sliding resistance of 800 ohms (suitably protected) fastened to the bench near the microscope, where it can be found and adjusted without moving the head from the eyepiece, complete control over the lighting is obtained, and the optimum intensity for any combination of any eyepiece, objective, condenser, and light-filter becomes possible with fully critical illumination.

Apart from the reduction of optical fatigue, the system has the further advantage of rendering fine detail more easily visible, and in cytological work the achromatic structures are much plainer. When working with the Abbe drawing apparatus the difficulty of balancing the illumination of the field and the drawing surface is eliminated.

There is nothing new in the use of a resistance with an electric lamp for microscope work, but users of "Pointolites," with all their advantages over other types, may be interested to know that such control is feasible. H. J. DENHAM.

Botanical Laboratory, British Cotton Industry Research Association, Shirley Institute, Didsbury, Manchester, November 11.

The Aurora Borealis of September 28–29.

WITH reference to my letter in NATURE of October 6 on the observation of the aurora on the night of September 28–29 and Father Cortie's record of the accompanying magnetic storm (NATURE, October 27), I have just received a communication from Mr. J. W. Young, of Glasgow, a portion of which may be of interest in the above connection :—

"It may interest you to know that by my records I find I also saw this. The back of my house (on south-west of Glasgow) gives me a clear view of some twenty miles along the Loch Lomond valley in the direction of magnetic north, and for some years it has been my practice to keep watch for such occurrences, much more frequent here than most are aware. Usually 8–11 p.m. is the period of greatest brilliancy, and the streams of yellow, pink, and green light sometimes extend, pulsating, almost to the zenith. . . ."

WILLIAM J. S. LOCKYER.

Norman Lockyer Observatory, Salcombe Hill, Sidmouth, S. Devon, November 7.

Applied Anthropology.

I WAS, unfortunately, unable to take part in the discussion on a possible Anthropological Service at Edinburgh, referred to in the leading article in NATURE of November 10, but there is one point on which I would have insisted had I been present: the danger of a little knowledge. Anthropology is fundamentally a branch of biology, not of literature or philosophy, except in so far as the latter is biological. It is, perhaps, the most complicated of all the branches of biology, and the branch in which the collection of precise data is the most difficult. To me it is inconceivable that a sound knowledge of anthropology can be obtained without a preliminary training in biological method. At present anthropological study, especially that of the physical or anatomical side, is in a state of chaos, largely because the comparative student has to make use of information of all degrees of accuracy or the reverse—mostly the reverse. What a missionary said two hundred years ago may carry greater weight than a recent investigation on sound scientific lines.

My own investigations in the Malay Peninsula and my more recent experience as a Government official in India have taught me the disadvantages under which an official labours in collecting anthropological information, and I think that most scientific men in the employment of any Government would agree with me in their hearts that there is no danger more to be feared in scientific administration than the interference of the administrative officer who possesses, or is led to think he possesses, a peculiar, but superficial, knowledge of any branch of science.

If anthropology is a branch of science, or rather, as I believe, a complex of the terminal twigs of several distinct branches, it must be studied seriously and scientifically, not merely tacked on as a kind of floral decoration to a classical or commercial education.

N. ANNANDALE.

Abden House, Marchhall Crescent, Edinburgh, November 11.

Use of Carborundum for Ruling Test Plates.

THE communication from Mr. A. Mallock in NATURE of September 1, p. 10, reminds me of the marked success that I have had in the use of fine carborundum points for scratching on glass. Some years ago, when confronted with the task of preparing small oscillograph mirrors from microscope cover-glasses, I found that a small fragment of carborundum crystal tied in the split end of a match or forced into a piece of soft rubber for a handle made an excellent glass-cutter. The scratches were so fine and clean-cut that the glass could easily be broken into very narrow strips.

Although very hard and sharp, the points are wide-angled, the angles as viewed in a microscope appearing to be in the neighbourhood of 90°.

It seems possible that these crystals, if the pressure were sufficiently light, might be used to rule lines on thin films of aniline colours without scratching the glass. W. G. CADY.

Wesleyan University, Middletown, Conn., October 22.

Bee-sting and Eyesight.

I WAS stung in my left eye by a bee yesterday just above the eyelid. Within an hour and a half that eye became almost insensitive to light, but quickly recovered. In the first stage of recovery it was practically colour-blind, and when the other eye was closed objects appeared as seen by the light of a sodium flame or a mercury arc light. To-day the eye has fully recovered. I am wondering whether other of your readers can record a similar experience.

J. W. GIFFORD.

Oak'ands, Chard, October 21.

The Age of the Earth.

WITH regard to Lord Rayleigh's letter (NATURE, November 10), I think my use of the word "suggestion," instead of "statement," for example, sufficiently indicated that I appreciated the fact that he did not definitely assert that the earth was becoming hotter. I am glad to find that his views and mine are not in essential disagreement.

HAROLD JEFFREYS.

Meteorological Office, South Kensington, London, S.W.7, November 15.