

miscible with the general cytoplasm, is deposited. In the undifferentiated germ cells the Golgi apparatus exists in the form of about four rings lying on the edge of the nuclear membrane, and we further emphasise the remarkable and unique fact that the Golgi rings of some germ cells are saturated with free fat long before the egg is differentiated from other cells.

A full account will be published later.

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Patiala).

DEV RAJ MEHTA  
(Government College, Lahore).

October 14.

#### Solar Radiation and Athermancy.

THE efficacy of a material in excluding solar heat is a complex function. For practical purposes, however, athermanous materials may be graded in terms of an empirical transmission factor,

$$F = (1 - R) / \{1 + (1 + E_2)[1/(1 + E_1) + 1/K]\},$$

where  $K$  is the conductivity (B.Th.U. per sq. ft. per degree Fahr. per hour),  $E_1$  the emissivity of the inner surface,  $E_2$  the emissivity of the exposed surface and  $R$  its reflecting power for solar radiation. Both surfaces are presumed to be in contact with air. Values for a few materials are tabulated below.

| Material    | Inner Surface        | Exposed Surface | $E_1$ | $E_2$ | $R$  | $K$   | $F$  |
|-------------|----------------------|-----------------|-------|-------|------|-------|------|
| Metal sheet | Silvered             | Silvered        | 0.02  | 0.02  | 0.90 | large | 0.05 |
| 1 in. wood  | White or black paint | White paint     | 0.95  | 0.95  | 0.70 | 1.0   | 0.08 |
| 3 in. wood  | " "                  | Black paint     | 0.95  | 0.95  | 0.95 | 0.3   | 0.11 |
| 1 in. wood  | " "                  | "               | 0.95  | 0.95  | 0.95 | 1.0   | 0.21 |
| Metal sheet | Silvered             | Blackened       | 0.02  | 0.95  | 0.95 | large | 0.24 |
| Metal sheet | Blackened            | "               | 0.95  | 0.95  | 0.95 | large | 0.33 |
|             |                      |                 |       |       |      |       | 0.48 |

It would be of interest to know whether there is any anomaly in this grading.

A. F. DUFTON.

Building Research Station,  
Garston, Herts, November 23.

#### An Amusing Conception of Scientific Discovery.

THE want of touch between politicians and science, at all events a score of years ago, is amusingly illustrated in the following extract from the official report of a speech made by the Marquis of Lincolnshire in the House of Lords on Dec. 6 last.

He was speaking on the Small Holdings and Allotments Bill, and was describing discussions which, when Minister for Agriculture in Sir Henry Campbell-Bannerman's Government, he had with the Prime Minister about the introduction of the Bill which emerged as the Small Holdings and Allotments Act of 1908.

The extract is as follows :—

"Sir Henry Campbell-Bannerman pricked up his ears and said : 'What a curious thing it is how the same wonderful sentiments and ideas sometimes simultaneously strike the noblest minds. I will give you an instance. When I was at Cambridge in the fifties there was a great big hulking undergraduate at St. John's College. He must have been very clever because, going one starry night for a ramble, he looked up at the firmament on high and discovered a planet. It was a wonderful thing to do, but it was absolutely true that that man discovered a planet, and, curiously enough, that very same night an old Frenchman, squinting through an opera glass or a telescope or

something of that sort, discovered it too.' And that, Sir Henry Campbell-Bannerman said, was a very wonderful development and almost a precursor of the *entente cordiale*."

It required an effort, at all events on the part of one reader, to recognise this highly original account of the simultaneous discovery of Neptune by Adams and Le Verrier in 1846.

X. Y.

December 13.

#### An Unclaimed X-ray Spectrometer.

IN the hope that we may be able to restore a piece of lost property to its owner, we would greatly appreciate the publication of the following facts.

Recently the New York Central Railroad had an auction sale of unclaimed baggage. One of the pieces of baggage contained what appears to be a simple X-ray spectrometer with a fluorescent scale for visual observation. The purchaser brought the apparatus to us for identification, and he is willing to restore it to its owner if we can locate him.

The instrument was sent as baggage on the New York Central Railroad from Albany, N.Y., to Chicago, where it arrived at 10.00 A.M. on October 21, 1924, presumably on the Twentieth Century Limited. The date makes it appear possible that the apparatus may have belonged to someone who attended the meeting of the British Association for the Advancement of Science in Toronto. The instrument was manufactured by Schall and Son, of London.

Inquiries should be directed to the undersigned, who will take the necessary steps to have the instrument returned to its owner.

PAUL E. KLOPSTEG.  
Central Scientific Co., Chicago,  
Illinois (U.S.A.).

#### The Oogenesis of *Lumbricus*.

I FEEL compelled, much against my own and Prof. Gatenby's feelings, to reply to his letter in NATURE of December 11. In the first place, I do not quote in my bibliography papers which I have not carefully read. In the second place, I have read the papers on yolk formation which Prof. Gatenby recommends. Hence my desire for an attempt at co-ordination of the divergent observations on this phenomenon in oogenesis. Lastly, may I record my agreement with him on the subject of Paraf's work ? I think his evidence is very strong, yet, at the same time, I would prefer to "add facts" and "avoid discussion" of work which is even yet in its infancy.

L. A. HARVEY.

University of Edinburgh,  
December 15.

#### 'Sun Circles' in Ritual Dances.

IN connexion with Miss Violet Alford's lecture on ritual dances, reported in NATURE of December 4, it would be interesting to know whether anthropologists familiar with ritual dances among tribes of the southern hemisphere, for example, the Australians, have noted in these the practice of dancing 'sun circles' in the reverse direction, which we should call 'widdershins.' As the apparent path of the sun in the southern hemisphere runs in the contrary direction to its path in our hemisphere, that is, from east through north to west, sun circles should surely be danced in this direction also.

W. E. F. MACMILLAN.  
42 Onslow Square, London, S.W.,  
December 6.