

this method difficult if not impossible. The apparatus required is simple. The method consists of the preparation, by mechanical means, of an accurately cone-shaped pillar of soil, of a known and definite angle, of the fitting to this pillar of a metal container designed to have the same angle, and of the undercutting and removal of the soil block. Since the container fits the block exactly, and since the lift is *via* the sides, the authors state, of the cone-shaped receptacle, no soil disturbance is possible. The paper, with diagrams, explains the method in full.

### Hygiene of the Garden

D. E. GREEN has seized the opportunity of wartime need to survey those plant diseases which are transmitted or aggravated by lack of hygiene in the garden (*J. Roy. Hort. Soc.*, 66, Parts 1-5, Jan.-May, 1941). This series of papers focuses attention upon the simplest and most economical methods of combating plant maladies, namely, by removing sources of infection and contributory causes. Incomplete removal of diseased material from previously infected crops, the presence of uncontrolled rubbish heaps, the use of contaminated soil for composts, sowing disease-bearing seed, unskilful watering, unbalanced manuring, and even undue handling of the plants by the gardener are all potent factors in the relative incidence of parasitic fungi. The list of diseases which are subject to hygienic control is an impressive one, and includes club root, several root-rots, footrots and damping-off, many virus diseases, leaf spots and rusts; in fact, all diseases should in some measure be subject to this form of control. Mr. Green describes numerous maladies with the help of excellent photographs, and it is difficult to escape the conclusion that phytopathologists and gardeners should direct far more attention to this efficient but unspectacular method of raising healthy plants.

### The British Ecological Society

REFERRING to the note in NATURE of May 31, p. 669, on his award of the Linnean Gold Medal Prof. A. G. Tansley writes: "In the notice of my work which appeared in NATURE of May 31 there is a small error which should, I think, be corrected. It is stated that in 1917 I took over 'the secretary's work and editorship of the Society's *Journal*'. It was not I, but Dr. (now Prof.) E. J. Salisbury, who became secretary of the British Ecological Society in the autumn of 1916, and he held the post until 1932. The guidance of the Society through the critical years of its development was thus shared by the two of us."

### The Ray Society

THE annual general meeting of the Ray Society having been omitted for the current year, with the consent of the members, the present officers and council will remain in office, with the exceptions that Dr. E. S. Russell, president of the Linnean Society, has been co-opted as a vice-president and Dr. Stanley Kemp as a member of council. In the annual report,

which has just been circulated, the Council states that the accounts show a much more satisfactory state of affairs than might have been anticipated under war conditions. The second volume of Dr. Bristowe's work "The Comity of Spiders" is nearly ready for publication. A volume on "The Larvæ of Decapod Crustacea" by Dr. Robert Gurney is in the printers' hands and will form the issue to subscribers for 1941. The Council will be glad to consider suitable works for early publication. Authors are requested to communicate with the secretary of the Society. The official address of the Society remains "c/o The British Museum (Natural History), Cromwell Road, London, S.W.7", but personal communications for the Secretary should be addressed to Dr. W. T. Calman, "Willowbrae", Tayport, Fife.

### Automatic Equipment in Trunk Telephone Working

UNTIL a few years ago, practically all trunk telephone working was done on a delay basis. The principle involved an extravagant method of operating, namely, the segregation of trunk mains into small groups, each of which was controlled by a telephonist. In the Engineering Supplement to the *Siemens Magazine* of March, Mr. H. E. Humphries gives an instructive discussion of the whole subject, laying stress on automatic equipment as an aid to trunk switching. With such an aid, a telephonist can occupy her time fully with other switching duties during a waiting period, and need concern herself with a waiting call only after receiving a signal that a free trunk is available. Remotely controlled automatic switches provide the telephonist with access to a multitude of all trunks. An analysing device in the automatic unit automatically determines which course should be followed. The telephonist leaves the circuit in this waiting condition and proceeds with other work, the supervisory lamp on the trunk side of the connexion giving a fleeting signal every six seconds to remind her that there is a call awaiting completion.

An automatic trunk exchange initially costs more than its manual counterpart, and the natural question arising is whether or not the additional expense of automatic working is a sound investment. Mr. Humphries states that the normal busy-hour load on the Capetown Trunk Exchange demand suite is approximately thirty-six calls per position. This figure is appreciably higher than any equivalent operating procedure could produce on a manual system. Another way of viewing the matter is that an automatic system, with its increased facilities, gives a better and faster service, which is the first necessary step of any administration towards active development of its trunk system.

### Meteor Observations in India during 1940

MOHD. A. R. KHAN, of Begumpet, Deccan, who has communicated the results of his observations of meteors for several years to NATURE, has sent an account of his observations during 1940. From this it appears that during the year a total watch of 103½ hours was maintained on 152 nights and the