by fissures in which houses have disappeared, and are blocked by avalanches which have fallen from the ravines. Father Gherzi estimates the loss of life at more than 40,000, by no means a large figure for an earthquake of this character. Probably the real number will never be known, as it is a custom in this district for families to live in caves hollowed out in the loess along the river-sides, which in many cases were blocked by the fall of avalanches.

The isoseismal 4, which forms the boundary of the known disturbed area, is incomplete towards the west. Its mean radius, in the portion drawn, is about a thousand miles. Thus the disturbed area probably contains more than three million square miles, and is perhaps not much inferior in extent to the whole of Europe. At the present time the largest disturbed areas known to us are those of the Assam earthquake of 1897 (about $1\frac{3}{4}$ million square miles), the Kangra earthquake of 1905 (nearly 2 million square miles), and the Charleston earthquake of 1886 (about 2,800,000 square miles). The last area is, however, bounded by an isoseismal line of intensity 2. If the corresponding isoseismal could have been drawn for the Chinese earthquake, the figure given above for its disturbed area would have to be multiplied several times. In any case it is clear that we are dealing with a shock which, if not the greatest, is certainly one of the greatest, known to us since earthquakes began to be studied.

Since the foregoing was written, a report by a small party of foreign travellers has appeared in the *Times* of June 4. Though the travellers were unable to examine the whole of the central region, they state that the shock was felt principally within an area of 15,000 square miles, bounded approximately by the parallels of 35° and 37° and the meridians of 105° and 107°, thus agreeing with the result deduced from Father Gherzi's map. The loss of life, however, is estimated at a far higher figure than that given above. "The prefectural Taoyin of Pingliang puts the total loss of life at 180,000, or one-third of the whole population; 30,000 perished at Kuyuan. Haicheng appears to have been almost completely buried by the surrounding hills tumbling in upon it, about 70,000 people being entombed." Such a total has but rarely been approached, and only twice, I believe, surpassed. The number of deaths due to the Messina earthquake of 1908 cannot fall far short of 100,000. In the Indian earthquake of 893 180,000 persons are said to have perished; in the Japanese earthquake of 1703, 290,000; and in the Indian earthquake of 1737 the reported number rises to a maximum of 300,000.

Stereochemistry.

AT the seventh Indian Science Congress Prof. B. K. Singh, who presided over the chemistry section, delivered an address on "Recent Advances in Stereochemistry," which has since been published in pamphlet form.

After reviewing the early development of the subject by Pasteur, the theory of the asymmetric carbon of van't Hoff and Le Bel, and the later researches on asymmetric nitrogen, sulphur, and selenium by Pope, Peachey, and others, Prof. Singh proceeds to discuss the more obscure relations subsisting between the amount of rotation and the constitution of the active substances. In this connection he touched on the work of Pickard and Kenyon, the main outcome of whose researches was to indicate a sudden rise of rotation produced at the end of a chain of five or a multiple of five carbon atoms—a phenomenon which was explained by the proximity of the first and fifth carbon atoms in the chain. Reference was also made to the work of H. O. Jones on the activity of quaternary ammonium bases containing different radicals and certain generalisations which followed. The influence of conjugation, as illustrated by the work of Rupe, and the abnormally high rotations produced in the derivatives of amino-camphor were also reviewed. This was followed by a reference to the relation of optical activity to position isomerism, with a discussion of Frankland's theory.

Prof. Singh, who has himself contributed certain observations on the subject, comes to the conclusion that neither Frankland's theory nor what he terms "Cohen's rule" accords with the facts; but omits to point out that both his own and Frankland's observations are made with dissolved substances in which the solvent may, and frequently does, modify the rotation, whereas Cohen and his co-workers purposely avoided the use of any solvent. Finally, the address dealt with those mysterious changes of rotation known as "the Walden inversion," which are effected by certain reagents, when one constituent of an asymmetric group undergoes replacement. The earlier theories based upon change of structure due to the reagent have since been shown to be untenable in the light of the work of Senter and Drew, who find that with the same reagent different solvents may produce a similar inversion. J. B. C.

University and Educational Intelligence.

BIRMINGHAM.—At the meeting of the Council of the University held on Wednesday, June 1, Mr. Walter H. Moberly was appointed to the chair of philosophy to succeed Prof. J. H. Muirhead, who is retiring from the chair in September next. Mr. Moberly is dean, fellow, and tutor of Lincoln College, Oxford, and one of the best known of the younger teachers of political and social philosophy in the Philosophy and History School of that University. His experience of municipal administration as a member of the Oxford City Council and his work with the Workers' Educational Association should contribute to make him a fitting successor to Prof. J. H. Muirhead.

Dr. H. J. W. Tillyard has been appointed to the chair of Russian, and Signorina L. P. di Castelvecchio to the Serena chair of Italian. Dr. Tillyard is the first occupant of the chair of Russian in the University—a chair founded on the fund collected for the purpose by the Birmingham Chamber of Commerce. Signorina di Castelvecchio is the first professor of Italian to occupy the chair founded on a generous benefaction from Mr. Arthur Serena and on funds collected by the Birmingham Chamber of Commerce. She is the first woman to be appointed to a chair in the University.

The Council has also appointed Mr. E. H. F. Mills, fellow of St. John's College, Cambridge, and secretary of the University Library, Cambridge, to the office of librarian which will shortly be vacant by the retirement of Mr. W. H. Cope.

CAMBRIDGE.—Dr. G. E. Moore, Trinity College, and Mr. W. E. Johnson, King's College, have been re-elected University lecturers in moral science, and Mr. F. Debenham, Gonville and Caius College, has been re-elected University lecturer in surveying and cartography. Mr. J. A. Venn, Trinity College, has been nominated Gilbey lecturer in the history and economics of agriculture. Mr. J. C. Wallace has been elected a junior fellow of Emmanuel College.

Miss F. E. Haines has been elected to a scientific fellowship at Girton College, and Miss M. T. Budden to an associates' fellowship in mathematics at Newnham College.