

by the company at the cost of fifty cents. The ordinary Hammond machine furnished with a back-spacing key can be used for manuscript diagrams up to about eight inches in diameter, but the machine No. 6, fitted with a sixteen-inch roll, permits of the preparation of diagrams fourteen inches in diameter. The usual silk ribbon gives a 'woolly' line and is far less satisfactory than the carbon ribbon. A highly calendered and high grade linen paper of medium to heavy weight, or a thin Bristol board may be recommended. Often more than one impression of the key is necessary to obtain the required depth of tint for photography; such repeated impressions can be made at great speed by employing the back-spacing key. Care must be taken not to smudge the carbon of the completed printing.

The accompanying cuts serve to show something of the method as applied to geological diagrams. The diagram of alphabets and legends has been reduced to three fourths of its original diameters. The legends are intended to represent a few examples of those possible with the machine. They can be indefinitely increased in number and varied in design by the engraving of new characters on the shuttle and by using various permutations and combinations of the existing characters. The map is reduced to two thirds of its original diameters. It was copied from Harker's sketch map of the Carrock Fell District, published in the *Quarterly Journal of the Geological Society of London*, Vol. 51, 1895, Pl. IV. Here the geological formations could have been yet more clearly differentiated by cross-hatching with the ruling pen for one of them, but this particular drawing was made to illustrate the neatness and clearness of the machine-made production rather than to illustrate an ideal diagram. So far as the type-written part of the 'drawings' is concerned, the use of the machine in preparing these illustrations represents a saving of from seventy-five to ninety per cent. of the time required by a draughtsman to duplicate the 'drawing.'

R. A DALY.

INTERNATIONAL BOUNDARY COMMISSION,
OTTAWA, CAN.

MEETING OF THE BRITISH ASSOCIATION IN SOUTH AFRICA.¹

THE arrangements for the forthcoming meeting of the British Association in South Africa have now been completed, and Mr. Silva White, the assistant secretary of the association, sailed for Cape Town in the *Walmer Castle*, on Saturday last, July 1. The number of members who will proceed to South Africa to attend the meeting is 385, and of these no less than 276 members have intimated their intention to visit the Victoria Falls at the conclusion of the ordinary work of the association. The official party, consisting of leading representatives of science and guests of the association, with the general and sectional officers for this meeting and the president, numbers 140 in all, and will sail by the *Saxon* on July 29. Most of the other members will proceed to the meeting by the *Durham Castle* and the *Kildonan Castle*, both of which sail on July 22.

There will be receptions and social functions, excursions, etc., at Cape Town, Durham, Pietermaritzburg, Johannesburg, Kimberley and Bulawayo. The central organizing committee for South Africa (chairman, Sir David Gill, K.C.B., F.R.S., hon. secretary, Dr. Gilchrist) has carried out the coordinating work of the program. The lists of local committees and subcommittees contain nearly one thousand names, from which it may be concluded that much interest is taken in the meeting.

Lectures of a popular character will be delivered at the chief towns visited. These lectures have now been definitely arranged as follows:

Cape Town: 'W. J. Burchell's Discoveries in South Africa,' Professor Poulton; 'Some Surface Actions of Fluids,' Mr. C. V. Boys. *Durban*: 'Mountains: the Highest Himalaya,' Mr. D. Freshfield. *Pietermaritzburg*: 'Sleeping-sickness,' Colonel D. Bruce. *Johannesburg*: 'Distribution of Power,' Professor Ayrton; 'Steel as an Igneous Rock,' Professor Arnold. *Pretoria*: 'Fly-borne Diseases, Malaria, Sleeping-sickness, etc.,' Mr. A. E. Shipley. *Bloemfontein*: 'The Milky Way and the Clouds of Magellan,' Mr. A. R. Hinks.

¹ From *Nature*.

Kimberley: 'Diamonds,' Sir William Crookes; 'Bearing of Engineering on Mining,' Professor Porter. *Bulawayo*: 'Zimbabwe,' Mr. Randall-MacIver.

The president's address to the association will be delivered at Cape Town, on August 15, and at Johannesburg, on August 30. Mr. G. W. Lamplugh's report on the geology of the Victoria Falls will take the form of an afternoon address to Section C at Johannesburg.

SCIENTIFIC NOTES AND NEWS.

THE American Medical Association met last week in Portland, Ore., with an attendance of about 1,500 members. Dr. Louis S. McMurtree, of Louisville, Ky., delivered the presidential address, taking as his subject 'The American Medical Association, its Origin, Progress and Purpose.'

M. CURIE has been elected a member of the Paris Academy of Sciences.

DR. ADOLF WULLNER, of Aachen, has been made an honorary doctor of engineering by the Technical Institute of Dantzig.

M. COMBES, recently premier of France, has returned to the practise of medicine in his native village.

THE steamship *Roosevelt*, which will carry Commander R. E. Peary to the Arctic regions, sailed from New York City on July 16.

PROFESSOR W. M. DAVIS, of Harvard University, sailed from New York, July 15, for England, to accompany the British Association to South Africa. The party will leave Southampton on July 29, and return in mid-October.

THE DE MORGAN medal of the London Mathematical Society has been awarded to Dr. H. F. Baker, F.R.S.

THE Bissett-Hawkins gold medal of the Royal College of Physicians has been presented to Sir Patrick Manson for the services he has rendered to science and humanity by his researches on tropical diseases.

THE Senn medal of the American Medical Association for an essay on some surgical topic has been awarded to Dr. John L. Yates, of Chicago.

THE British Meteorological Office, which corresponds to our Weather Bureau, has been reorganized, and placed under the charge of a committee. The appropriations for the service is £15,300, and the salary of the director is £1,000. The committee is as follows: Mr. W. N. Shaw, Sc.D., F.R.S., director; Captain Arthur M. Field, R.N., hydrographer to the navy; Captain A. J. G. Chalmers, professional officer of the Marine Department, Board of Trade; Mr. W. Somerville, Sc.D., assistant secretary of the Board of Agriculture and Fisheries; Professor G. H. Darwin, F.R.S., University of Cambridge; Professor Arthur Schuster, F.R.S., University of Manchester; Mr. G. L. Barstow, nominated by the Treasury.

AMONG those who are the recipients of the king's birthday honors *Nature* notices the following: Lord Rayleigh, O.M., F.R.S., has been made a privy councillor; knighthoods have been conferred upon Professor T. McCall Anderson, of the University of Glasgow; Mr. E. W. Brabrook, C.B., formerly registrar of Friendly Societies; Dr. A. B. W. Kennedy, F.R.S., emeritus professor of engineering and mechanical technology at University College, London, and president of the admiralty committee on machinery designs; Dr. Boverton Redwood; and Dr. W. J. Smyly, president of the Royal College of Physicians, Ireland. Colonel D. Bruce, F.R.S., has been made a Knight Commander of the Bath. Dr. W. T. Prout, principal medical officer, colony of Sierra Leone, and Dr. J. W. Robertson, late commissioner of agriculture and dairying of the Dominion of Canda, have been made C.M.G.'s. The honor of Knight Bachelor has been conferred upon Dr. E. S. Stevenson, member of the medical council of the Cape of Good Hope; and Mr. Philip Watts, F.R.S., director of naval construction, is made an ordinary member of the civil division of the second division, or Knight Commander, of the Order of the Bath.

STUDENTS of Sibley College, Cornell University, have ordered designs made for a bronze tablet, which they will erect in memory of the late Dr. R. H. Thurston, formerly director of the college. The tablet is being designed