

earlier appearance of an increased concentration in the blood following oral ingestion. Again, *lævulose per os* had a greater effect on the respiratory quotient than when given *per rectum*, whilst with dextrose the reverse appeared to be true, although it was less readily absorbed from the rectum than the former.

The author considers that the differences in the metabolic effects between oral and rectal administration cannot be explained by the absorption of the materials into the systemic venous system alone as distinct from an absorption into the portal system, since the former drains only the extreme lower end of the large bowel. He therefore suggests that the immediate fate of these materials may depend in part upon whether the liver is in an active condition or not.

This condition is presupposed following oral ingestion, but if the rectal administration occurs sufficiently long after the previous meal, it may be expected that this organ is in a state of relative quiescence. The idea that the liver may give off to the blood-stream a substance of the nature of an internal secretion has already been envisaged by some experiments of Cannon's on the existence of a substance causing acceleration of the denervated heart, which was only clearly demonstrated in animals digesting meat.

The work suggests lines for future research and at the same time indicates that if resort has to be made to rectal alimentation in a patient, alcohol and dextrose are the substances which should be chosen for this purpose.

The Russian Geographical Society.

WE have received from the Russian State Geographical Society twelve parts of its *Izvestiya*, forming vols. 52-57, for the years 1916-1925. They contain a series of valuable contributions to the geography of the Russian dominions, and British geographers will gladly welcome the renewed activity of that important Society. The word 'Imperial' in the title of the Society was omitted in 1916 and has now been replaced by 'State.' That the conditions of publication in Russia are difficult are indicated by the poverty of the paper, the sparseness and inferior quality of the illustrations and the maps. In these respects the later volumes show a marked improvement, which encourages the hope that the journal will reach its former excellence. The volumes contain many important contributions, but they are rigidly confined to the Russian language, the only exception being that one paper has a title and a short summary in French. If the titles of the papers and the lists of contents were repeated in some western language, the accessibility of its contributions would be much increased. Some of the work has been delayed in publication; thus volume 57, pt. 1 (pp. 3-60), includes papers by Conradi, Kell, and Ghulten on the geological and geographical results of an expedition to Kamchatka in 1908-1910, and a discussion by Prof. Karakash of *Eoanthropus dawsoni* (vol. 52, 1916, pp. 673-714) has been generally overlooked in Great Britain.

Among the papers on physical geography are the discussion by S. C. Bergh (vol. 52, pt. 8, 1916, pp. 579-648) of the origin of loess; many contributions to glacial geography, including a study of the movements of glaciers in the Caucasus by P. Tzirulnikov (vol. 53, 1917, pp. 45-56, 5 pls.), two papers by Belyaev and Besedin (vol. 55, pt. 1, 1919, pp. 1-124) on glaciers in Darvaz from observations during an excursion by the Russian Geographical Society in 1919, and a catalogue by Tronov of the glaciers of the Altai (vol. 57, pt. 2, pp. 107-159). General problems connected with glaciation are discussed by Sobolov (vol. 56, pt. 1,

1924, pp. 101-140, and pt. 2, pp. 5-36) on the glacial formation of northern Europe with reference to the geo-morphology of the Russian plain. The evidence from the Caucasus as to the succession of glacial periods is adduced by Renngarten from the Valley of Assa in the northern Caucasus (vol. 57, pt. 2, 1925, pp. 53-106). I. N. Shamkov describes the climate of Abas-Fuman and its value as a health resort.

The papers on European geography are relatively few, but Alyabev (vol. 56, pt. 1, 1924, pp. 5-54) contributes an account of the Kurghalov Peninsula and the south coast of Finland, and their geographical relationship. Yakovlev (vol. 57, pt. 2, 1925, pp. 3-22) describes the relief of Leningrad and its effect on the inundations.

Shokalskii in a short paper discusses the acceptance of republics by the north-western Russian States (vol. 56, pt. 1, 1924, pp. 154-161), and A. Petrov discusses the physical geography of the Murmansk area (vol. 55, pt. 2, 1924, pp. 3-13).

Studies of the Siberian rivers are given by Sapozhnikov and Nitikin, dealing especially with the plant distribution on the lower valley of the Obi (vol. 55, pt. 1, 1923, pp. 135-180); and by Ghromov, who describes his work at the mouth of the Yenisei (vol. 56, pt. 2, 1925, pp. 107-118).

Contributions on Russian Turkestan include the papers by Spiridonov on the natural history of parts of the Kizil-Kuma (vol. 56, pt. 2, 1924, pp. 145-173), and Smirnova describes the western parts of the Kirghiz Territories (vol. 55, pt. 2, pp. 103-112); Pavlov describes the North Gobi Desert and a traverse of Mongolia (vol. 57, pt. 1, 1925, pp. 111-168).

Mushketov describes the eastern Ferghana and the Alai (vol. 53, 1917, pp. 83-137, 8 pls.), and also a journey in Narjensk and Kashgar (*ibid.*, pp. 138-166). There are some obituaries, including one of P. O. Rovinskii, dealing especially with his work in Serbia (vol. 52, 1916, pp. 515-542), and an appreciation by Sokolovskii of the geographical work of Philip Avril (vol. 57, pt. 1, 1925, pp. 67-98).

Peat Investigation in Canada.

ABOUT eight years ago a Peat Committee was appointed by the Government of Ontario and the Federal Government of Canada, and was directed to find, if possible, a practical commercial method for converting raw peat into fuel. The Committee considered carefully all the more important processes for winning peat fuel which had been previously proposed, and concluded that the only practical commercial method of winning peat fuel is by excavating, mixing, spreading and forming the raw peat by

automatic machines. The peat blocks thus formed and spread are then to be dried in the air. Since this process decreases considerably the number of labourers required per ton of fuel, it is well adapted for countries such as Canada, where the cost of labour is high.

The Committee made a careful and exhaustive examination of the efficiencies of two large-scale excavating and spreading plants. One of these had been devised in Sweden by Anrep, and the other in