

SHORTER ARTICLES.

A NEW OCCURRENCE OF CASSITERITE IN ALASKA.*

DURING the past season while making a hasty reconnaissance of the York gold field of Alaska, my attention was called to some auriferous gravels which carry a large percentage of stream tin. This stream tin is found in considerable quantities on Buhner Creek, which enters the Anakovik River from the west about three miles from Behring Sea. The occurrence is perhaps best located by stating that it lies some ten miles east of Cape Prince of Wales and hence very near the northwestern extremity of the continent. On Buhner Creek some two to three feet of gravel overlie the bed rock which consists of arenaceous schists which are often graphitic, together with some graphitic slates. The bed rock is much jointed, the schists being broken up into pencil-shaped fragments. They strike nearly at right angles to the course of the stream and offer natural riffles for the concentration of heavier material. A hasty reconnaissance of the drainage basin of this stream, which includes not more than a square mile of area, showed the same series of rocks throughout its extent. At a few localities some deeply weathered dark green intrusives were found, which, on examination by the microscope, were found to consist almost entirely of secondary minerals. In some cases, however, a little plagioclase was still unaltered and a suggestion of ophitic structure remained, so that these are probably of a diabase character. The slates and schists are everywhere penetrated by small veins consisting usually of quartz with some calcite and frequently carrying pyrite and sometimes gold. These veins are very irregular, often widening out to form blebs and again contracting so as not to be easily traceable.

The stream tin is concentrated on the bed rock with other heavy minerals and was found by the miners in the sluice boxes. A sample of the concentrate in one of the sluice boxes was examined by Mr. Arthur J. Collier and yielded the following minerals: cassiterite, magnetite, ilmenite, limonite, pyrite, fluorite, garnets and

gold. The determination of percentage by weight was as follows: ninety-five per cent. tin-stone, five per cent. magnetite; other minerals five per cent. The cassiterite occurs in grains and pebbles, from those microscopic in size to those half an inch in diameter; they have sub-rounded and rounded forms. In some cases there is a suggestion of pyramidal and prismatic crystal forms. The cassiterite varies from a light brown color to a lustrous black.

A second locality of this mineral was found on the Anakovik River half a mile below the mouth of Buhner Creek. Here the cassiterite is also found with the concentrates from the sluice boxes of miners. I observed one specimen from this locality which was some two inches in diameter.

During the hasty reconnaissance no acid intrusives nor pegmatite veins were found in the drainage basin. The nearest known granitic rocks are in the biotite granite mass which forms the promontory of the Cape Prince of Wales. It is hoped during the coming season that more detailed work in this region will throw further light on these interesting deposits.

ALFRED H. BROOKS.

NOTES ON PARASITES—56: ECHINOSTOMUM
BURSICOLA LOOSS AND E. CLOACINUM
BRAUN, FROM A NOMENCLATURAL
STANDPOINT.

PROFESSOR MAX BRAUN* has recently proposed the name *Echinostomum cloacinum* as a substitute for *Distomum bursicola* Creplin, upon placing this species in the genus *Echinostoma*. Braun's reason for changing the specific name is that there is already an *Echinostomum bursicola* Looss, 1899, and he assumes that this invalidates the specific name *bursicola* Creplin, 1837.

In this decision, Braun has fallen into error. It is not *bursicola* 1899 which invalidates *bursicola* 1837, but the latter invalidates the former. Hence *E. cloacinum* Braun, 1901, must fall as a

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* 1901.—Ueber einige Trematoden der Creplinschen Helminthensammlung. Cent. f. Bakt. Paras. u. Infek., XXIX., 1 Abt., No. 6, Feb. 25, 258-260.

synonym of *Echinostoma bursicola* (Creplin, 1837) nec Looss, 1899.

In order to straighten out the synonymy immediately, I here propose the name *Echinostoma africanum*, nomen novum, as substitute for *E. bursicola* Looss, 1899, nec (Creplin, 1837) Stiles, 1901.

CH. WARDELL STILES.

BUREAU OF ANIMAL INDUSTRY.

AMATEURISM AND MENTAL INERTIA IN
PUBLIC SERVICE.

In a striking presentation of the results of 'Official Obstruction of Electric Progress' in Great Britain, by Professor J. A. Fleming, in *The Nineteenth Century* for February, that distinguished writer and scientific authority describes the outcome of the existing system of public service in Great Britain in the departments of telegraphy and telephony and the relative retrogression of that nation in all departments of electrical engineering. "In reviewing the nationality of those who have thus helped to make the electric current the humble servant of mankind, it is impossible not to be struck with the fact that British names do not preponderate."

In pure scientific research, Great Britain has held her own; in detailed improvements and minor advances she has not been backward; but has made no fundamental invention or discovery, except, perhaps, those 'of Lord Kelvin in submarine telegraphy, of Mr. Swan in electric lighting and of Professor Hughes in telephony'; practically all first-rate novelties have originated in other countries, for a generation past. The reason is attributed largely to the fact that in 1870, just at the dawn of the period of electrical activity, the Government set itself up in business as an electrician and proceeded to create a gigantic Government monopoly in one large department of electrical invention which has exercised a most undoubted control over the supply and demand for invention in a wide area of electrical work. It invested £10,000,000 in telegraph purchases, made the business a monopoly, and thus smothered invention through that monopoly and an always characteristic governmental inertia, an inertia, misnamed conservatism, always to be

observed where, as in such cases, the alertness in effecting improvement and in competition which characterizes private business for private profit is absent. This 'conservatism' is seen in all departments of the public service and is liable to produce serious retrogression in every national enterprise and in all countries. It was also illustrated, according to Professor Fleming, in the case of the telephone. No sooner was this extraordinary invention made practicable than the British Government, even without explicit authority of law, compelled its proprietors and promoters in that country to pay tribute to the Postal Department, and to-day, while the postal service and the telephone are conducted at a loss, the telephone is made to contribute, without substantial return to its proprietors, the amount of £130,000 to the profit side of the postal service ledger; while the official service of the telegraph, too largely amateur, brings in a loss of over £220,000. The National Telephone Co. has paid into the treasury of the postal service over a million of pounds, since its capitulation to that service, as a 'tax on a new industry barely twenty years old.' The higher tribunals have never confirmed this act of piracy, as it is considered by the members of the company.

As this writer states: "The whole behavior of the post-office towards private enterprise in telephony in the last twenty years has been marked by inconsistency, inaptitude and want of prevision." The business which it itself conducts is a source of enormous loss; that which it simply taxes and burdens pays a sufficient profit to bear this invidious taxation, to which other industries are not subjected. It is a fair presumption that, were the telephone managed directly by the Government, it would exhibit a lack of thrift and efficiency similar to that characterizing the postal and the telegraph business. Meanwhile, also, the postal service deliberately impedes the telephone management in its endeavors to secure rights of way, and compels it to charge the public a much higher tariff than would be fair and practicable were it not discriminated against in taxation, and thus its range is restricted as well as its value to those who are able to secure its service. In all ways the hope of reward which is the