

writer's paper on "The Acquirement of Proficiency in Qualitative Analysis,"<sup>4</sup> which is based on letters from many teachers of qualitative analysis and leads to the conclusion that the intelligent handling of a miscellaneous qualitative analysis can best be taught in a subsequent course accompanying or following the course in advanced quantitative analysis.

HERMON C. COOPER

SYRACUSE UNIVERSITY

### SURVEYS IN ALASKA

FOURTEEN parties of the Geological Survey, including about 50 men, are at work surveying and studying the mineral resources of Alaska. These parties are widely scattered over the territory and are doing work of many different classes.

One party is engaged in exploring Noatak River, in northwestern Alaska, north of the Arctic circle. This party, which is under the leadership of Geologist P. S. Smith, with C. E. Griffin as topographer, will make its way up Alanta River with canoes and hopes to find near the head of the river a pass across to the head of the Noatak and to descend that river to the Arctic Ocean at Kotzebue Sound. The region which will be traversed is unsurveyed and much of it is almost unknown.

A. G. Maddren is studying the geology and mineral resources of the extreme northeastern part of Alaska, north of Porcupine River. He is working in conjunction with a survey party of the International Boundary Commission.

Investigations of the water available for placer mining in the several camps of the Yukon-Tanana region, begun four years ago, are being continued this year. C. E. Ellsworth is engaged in this work in the Fairbanks and Birch Creek districts and E. A. Porter in the Fortymile district. These engineers made their way inland in the early part of April and began work as soon as the ice broke in the streams.

Two parties are continuing the reconnaissance mapping and study of the mineral re-

sources of the Yukon-Tanana mining districts. One of them, which is under the charge of L. M. Prindle, assisted by J. B. Mertie, Jr., is working in the area known as the Circle quadrangle, which lies between parallels 64 and 66 and meridians 142 and 146. The other party, led by H. M. Eakin is in the Rampart quadrangle, an area covering about a degree of latitude between meridians 150 and 154. The preliminary mapping of these quadrangles, which include some placer districts, should be completed this year.

The region tributary to the Pacific seaboard of Alaska is the one which is now attracting most attention, because its mineral resources are being made available by railways. For this reason the surveys and investigations of this part of the territory are being energetically pushed by the Geological Survey. The province includes fields of high-grade coal and also copper and gold deposits, besides considerable arable land.

Two parties are at work extending the surveys in the southern part of the Copper River region, including the Hanagita Valley and the Bremner River basin. One of them, under D. C. Witherspoon, is making topographic surveys; the other, under F. H. Moffit, assisted by Theodore Chapin, is making geologic surveys and studying mineral resources.

A topographic base map of the Valdez Inlet mining district has been completed by J. W. Bagley. Mr. Bagley began work in April and continued until the middle of July, when he transferred his party to Kenai Peninsula and began a survey of the Moose Pass mining district. After completing this work he will begin the mapping of the Sunrise placer district.

R. H. Sargent, with a party of five men, landed at Kachemak Bay about June 1 and began mapping the western part of Kenai Peninsula.

G. C. Martin is engaged in studying the coal resources of the same region. Later in the season Mr. Martin will visit the Katalla oil field.

Kenai Peninsula has recently become the scene of some important developments in

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auriferous lode mining. B. L. Johnson is investigating the lode and placer deposits of the northern part of the peninsula.

The Yentna placer district lies about 150 miles north of the head of Cook Inlet. A topographic base map of this region was made some years ago, and a study of its geology and mineral resources is now being conducted by S. R. Capps.

A. H. Brooks, the geologist in charge of the Alaska surveys and investigations, will sail from Seattle for Prince William Sound on August 15. He will visit the lower Copper River region and the Valdez Inlet mining district and will spend some time on Kenai Peninsula.

#### THE BRITISH CENSUS

THE preliminary report of the census of England and Wales has been promptly made public. According to an abstract in the *British Medical Journal* the enumerated population of the United Kingdom on April 2, 1911, was 45,216,665, distributed as follows: England, 34,043,076; Wales, 2,032,193; Scotland, 4,759,445; Ireland, 4,381,951. It thus appears that England contains over 75 per cent. of the population of the United Kingdom, Scotland rather more and Ireland rather less than 10 per cent., while Wales contains the remaining 4½ per cent. The absolute diminution in the population of Ireland, noted in previous intercensal periods, has continued in the last, but the proportional decrease (1.7 per cent.) is less than any recorded since 1851.

In England and Wales the population has increased from 32,527,843 to 36,075,269, a percentage increase of 10.9. This is the lowest rate of increase on record, the rates for the two previous decennia being 11.65 and 12.17 respectively. The rate of increase of population depends upon two factors: (1) the balance between births and deaths; and (2) the balance between outward and inward passenger movement. The net gain by excess of births over deaths was slightly higher than in the previous decennium (12.44 as against 12.39 per cent.), a result due to the counterbalancing of a large reduction on the birth-rate by

a still larger reduction of the death rate. The loss by balance of passenger movement was nearly half a million persons as compared with about 68,000 in 1891-1901, and over 600,000 in 1881-91.

With regard to the counties in which there has been a considerable rise or fall in the population it appears that some of the highest increases occurred in counties immediately surrounding the metropolis; Kent, however, showed an increase of only 8.8 per cent. The distribution of population in urban and rural districts, respectively, and their relative changes in the last intercensal period are as follows: In 1901, the urban population of England and Wales was 77 per cent. of the total and the rural population 23 per cent. For 1911, the figures are 78.1 and 21.9. The rate of increase in rural districts has risen from 2.9 to 10.2 per cent., and the rate in urban districts has fallen from 15.2 to 11.1 per cent. It should, however, be noted that the rates represent an actual increase of 2,818,072 persons in the urban and of 729,354 in the rural districts.

There has been a great increase in the populations of some of the suburban towns and districts which, conveniently designated the "Outer Ring," make up Greater London. The following have increased their population more than 70 per cent. in the last ten years: Southgate (124.2), Southall Norwood (99.4), Ilford (89.6), Ealing (85.4), Finchley (78.2), Surrey Rural Parishes (75.1), Hendon (72.9) and Barnes (70.5).

The proportion of females to males (1,068 to 1,000) was the same as at the previous census, but when due allowance is made for the number of males absent on military service in South Africa in 1901, it is probable that the true proportion of females to males was somewhat lower in 1901 than in 1911. The sex distribution varies considerably in different parts of the country, the proportion of females being lowest in Monmouthshire (912 to 1,000) and the highest in Sussex (1,218 to 1,000).

Three metropolitan boroughs show a percentage increase in population of more than