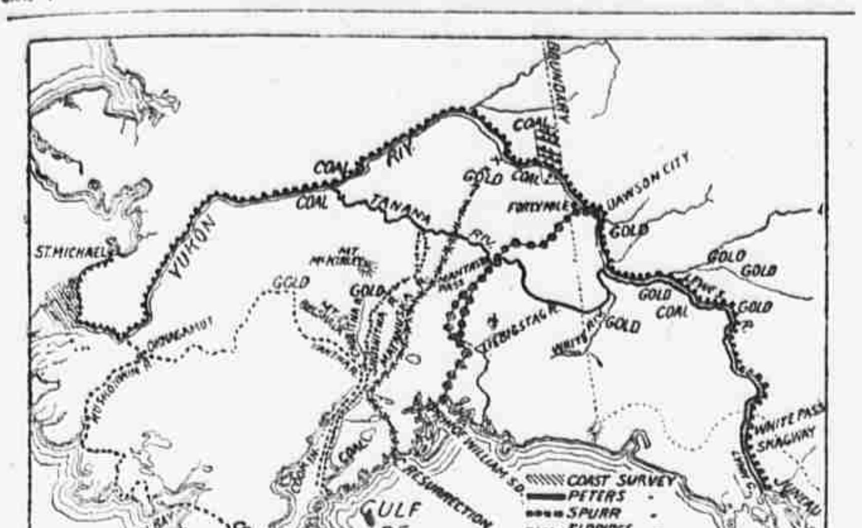
EXPLORATIONS IN ALASKA.

SIX GOVERNMENT PARTIES GRIDIRON IT WITH SURVEYS.

Last Summer's Great Work Takes Inner Alaska Out of the Realm of the Unknown —A Map Showing the Routes and Discoveries of Gold and Coal—New Entrance to the Yukon Has Been Discovered

The most notable series of explorations undertaken by the United States Government within a generation was successfully carried out last summer. While the attention of our public was centred upon the progress of the war six exploring parties that had been sent to Alaska in the spring were hard at work on the tasks assigned to them. These parties were in addition to the large force sent north by the United States Coast and Geodetic Survey to map the entrance to the Yukon River near St. Michael. The six inland expeditions were authorized by Congress in March last when appropriations were made for the exploration of central Alaska by the United States Geological Survey and for somewhat similar expeditions by the War Department. The object of all this work was primarily to determine the limits of the gold deposits and also to examine into the other economic resources of Alaska and to ascertain the practicability of building railroads and highways in our Territory. The December number of the *Bulletin* of the American Geographical Society prints an interesting summary of the



work of these expeditions with a map showing their routes, and the facts for this article and map are taken from that magazine. As the routes show, a great deal of unknown Alaska from the coasts to the Yukon was traversed by these expeditions.

The United States Geological Survey sent out four parties. Two of them, commanded by Eldridge and Spurr, were to start from the head of Cook Inlet, on the south coast of Alaska, and travel, one northeast and the other northwest to the Yukon, and then to rendezvous at St. Michael in the early fall. The other two, under Barnard and Peters, were to take the usual route from Skagway over White Pass and down the Yukon. Near the mouth of White River Peters's party was to start westward, cross to the headwaters of the Tanana and down that river to the Yukon, finally rendezvousing with the two Cook Inlet parties at St. Michael. The fourth party, under Barnard, was not to make an exploratory survey of the route, as was the case with the other parties, but was to continue down the Yukon to Circle City and there make a detailed topographic and geologic survey of an area of about 2,000 square miles. This programme for the Geological Survey parties was carried out almost to the letter and every task was satisfactorily accomplished without serious mishap, delay or sickness. Each of the parties consisted of a geologist and a topographer with four to six laborers to pack the outfits, row the boats, &c. All the parties were remarkably well equipped for their work in personnel, instruments and supplies. No care or money had been spared to outfit them in such a way as to increase their chances of success. The results were everything that could be expected, in spite of the hardships and difficulties that were met in travelling overland in so inhospitable a region.

The labor and hardships involved were enormous. The Klondike gold seeker thinks he has a hard time of it on the march, but his journey to the upper Yukon is merely a pleasure jaunt in comparison. He travels over well-known routes or along trails and down streams where he is seldom out of sight of his fellow prospectors. The Government exploring parties, however, followed no beaten path, nor did they navigate placid and well-known streams. Each plunged into the unknown interior, making its way over great mountain ranges and trackless wastes for 600 to 700 miles between the starting point and the Yukon. And they still had hundreds of miles of boating on that river before ending their Alaskan journey at St. Michael.

For water transportation each party had specially designed canoes so light that they could be carried from one navigable stream to another. All the bedding, provisions, and instruments were transported in these or packed on the backs of the members of the party. Most of the smaller rivers are shallow streams, filled with rocks, rapids, and cataracts, so that travel by boat was anything but safe and certain. There were no roads or trails, but the heavy-laden men had to fight their way over rugged mountain slopes covered with masses of loose rock, the spaces between which were hidden by a soft depth of treacherous moss, or perhaps fallen timber, dense underbrush, or forbidding glacier and snowbank barred the way at every step. Much of the time the explorers were drenched to the skin by rain, mist, or frequent fordings of the icy streams. They often waded in the lesser rivers, towing their boats for hours at a time.

The parties sailed for Alaska during the first week in April. The entire expedition was under the direction of George H. Eldridge, geologist, until it arrived in Alaska, when the parties separated, and the commander of each assumed independent charge. Mr. Eldridge was accompanied by Robert Muldrow, topographer, and his party was landed at the head of Cook Inlet by the United States gunboat Wheeling. Thence they boated up the Sushitna River to near its headwaters, whence they worked northeastwardly to the mountain divide separating that river from the Tanana. The original plan was that this party should continue down the Tanana to the Yukon and St. Michael, but the difficulties encountered were such and the mountain range crossed was so forbidding that the journey down the Tanana being unnecessary because of its being made by another party, Mr. Eldridge returned by the same route as that on which he entered. This party found that only a short distance from the head of Cook Inlet the Sushitna is divided into several large rivers, notably the Chulitna, which appeared to be the main stream, and the Yantna, both of which come in from the north and west, and the Sushitna, which bears off well toward the northeast. This latter stream they followed to its head and crossed over the divide at an elevation of nearly 3,000 feet to the headwaters of the Tanana. "The most notable discovery of this party was the location of a mountain which they identified as Mount Bulshaia, between the forks of the Chulitna and Yantna. The elevation of this mountain was determined to be a little over 20,000 feet, and, if this height is verified by office computation and the work of the second party, its position will be established as that of the highest mountain in the United States."

It does not seem clear that the above statement concerning Mount Bulshaia is quite correct. In 1896 Mr. W. A. Dickey led a party of prospectors up the Sushitna River, and the results of their discoveries were first announced in a long article which Mr. Dickey wrote for THE SUN, published in this newspaper on Jan. 24, 1897. They discovered Mount McKinley, of which the Indian name, according to Dickey, is the Bulshoe Mountain. He estimated that the height of Mount McKinley was about 20,000 feet. His sketch map of the region, published in THE SUN, corresponded in its main features with that here reproduced. But he represented mountains from "3,000 to 6,000 feet in altitude," where "Mount Bulshaia, over 19,500 feet," is shown on this map, and he wrote that when south of these mountains he could see the top of Mount McKinley rising high above them to the north. This map shows both Bulshaia and McKinley. It seems likely that a mistake may have been made, not by the explorers, but by the compiler of the results of their work and of the map which accompanies his article; and that Bulshaia is identical with McKinley, which, according to Dickey's spelling, is locally known as "Bulshoe." THE SUN would be glad to hear from some one of the explorers now in Washington who are undoubtedly able to decide whether this conjecture is or is not correct.]

The second party was under the leadership of J. E. Spurr, geologist, assisted by W. S. Post, topographer. This party accompanied the first as far as the forks of the Sushitna and made their way thence to the westward over the dividing mountain ranges to the headwaters of the Kuskokwim River, down which they floated on improvised rafts, crossing the Yukon south of St. Michael. As this party completed their journey early in the season, they returned to the Kuskokwim at Oknagamut and continued down that river to the ocean and along the coast southwest to Bristol Bay and crossed to Cook Inlet, their starting point, before the close of navigation in the early winter.

The third exploratory party, under the direction of J. W. Peters, topographer, who was accompanied by Alfred Brooks, geologist, landed at Skagway, at the head of Lynn Canal, and took the White Pass route, via Marsh and Bennett lakes, down the Lewes to the mouth of White River. Thus far this party and the fourth travelled together, their outfits being carried by the regular transportation companies. Near the mouth of White River, however, Mr. Peters's party ascended a small stream for over 200 miles, crossed the mountain range that forms the divide and, bearing off to the northwest made their way to the headwaters of the Tanana River, down which they travelled to its junction with the Yukon. Each of the above three parties conducted a traverse or route survey, mapping at the same time as much of the adjacent topography as possible, while the geologists made a careful study of the economic resources of the region passed over and took photographs with which to illustrate their reports.

The fourth party, under the direction of E. C. Barnard, topographer, which travelled with the Peters party as far as the White River, continued down the Yukon to the international boundary beyond Forty Mile. There they measured a base line, expanded a system of primary triangulation and completed a careful topographic survey of 2,000 square miles of our territory adjacent to the boundary and on both sides of the Yukon, covering the more important gold fields in United States territory. This map will be published on a scale of four miles to one inch and in 200 feet contours (lines connecting points of equal elevation) as one of the regular edition of topographic maps of the United States Geological Survey.

Each of the eight topographers and geologists was selected for his special fitness to perform the trying duties not only of travelling in an unknown wilderness but also of safely guiding and managing a party of men through the hardships they must encounter, and at the same time of satisfactorily conducting their surveys and examinations. All had had wide and varied experience in similar surveys in the most inaccessible portions of the Western United States and under the most embarrassing conditions which this country affords. Mr. Spurr made surveys in the Yukon region in 1896 and was therefore experienced in the duties he had to perform. Messrs. Eldridge, Barnard and Peters had spent twelve to fifteen years each on Government surveys in the Appalachian Mountains, the Adirondacks, the deserts of Arizona, the Sierras of California, the Big Horns of Idaho and the Rockies of Montana. The others had had equally varied experience, but for shorter periods of time. The laborers or packers were equally experienced men. All were chosen from the best camp hands employed annually by the many field parties in the Geological Survey. They were the pick of the Adirondack guides and the Minnesota, Idaho and Washington woodsmen. The instruments taken were of the lightest and most portable design and were carried in watertight tin cases. All provisions were arranged in small sealed tin or canvas packages to preserve them from moisture, and light sleeping bags completed the paraphernalia. A result of their work of prime importance were their discoveries of gold and coal, which are indicated on the map.

The two army expeditions were equally successful in their results, but as they have not all yet reached the United States the full output of their labors is not known. The party under Capt. Glenn started in at the head of Cook Inlet and ascended the Matanuska River, which is the first important stream to the east of the Sushitna. From the headwaters of this stream they crossed over to the Copper River, where their route connected with that of Capt. Abercrombie's party. The same party (that of Capt. Glenn) crossed Kenai Peninsula, from Cook Inlet to Cape Resurrection, on the ocean. A branch of this party continued north across Tanana River and the head of Birch Creek to Circle City, where they will winter.

Capt. Abercrombie's party started in at Prince William Sound, near the mouth of Copper River, and crossed Valdes Glacier, where considerable hardship was experienced and a few lives are reported to have been lost. Continuing overland, they reached the Copper River near the mouth of Liebigstag River and skirting the Copper River on the low ridges bordering its west shore, they continued to Mantasta Pass, whence they crossed to the Tanana River, intersecting the route taken by Mr. Peters, and continued on to the head of Forty Mile Creek, which was explored in 1883 by Mr. Spurr, and down this they made their way to the Yukon.

Each army expedition consisted of about fifteen men, including civilians and packers. Transportation was by pack animals, and they proved most satisfactory adjuncts to Alaskan travel. No difficulty was experienced in subsisting the mules on wild feed, and all stood the hardships of the journey admirably, thus lightening the physical hardships of the men.

The routes of these Geological Survey parties were so planned in conjunction with the two army expeditions up the Copper River as completely to gridiron with surveys the great Alaskan interior between the southern coast and the Yukon highway. From the time of their departure in April no word was received from any of these parties, as all were off the beaten track. It had been planned that they should reach St. Michael about the middle of September, so as to catch the last steamers for Seattle, and so well did they plan their movements that on Oct. 7 Messrs. Peters and Barnard reached Seattle from St. Michael, bringing word that Spurr had been heard from and would arrive by a later steamer. Less than a week afterward Eldridge's party reached Seattle from Cook Inlet. All had successfully performed the duties assigned them, and as a result have added to our knowledge such a mass of information relative to the geography and resources of interior Alaska as will take that region forever from the realm of the unknown.

The party sent by the United States Coast and Geodetic Survey to map the hydrography at the mouth of the Yukon River lived on one of the large vessels of the Coast Survey, and had in addition a number of seaworthy launches for soundings and other hydrographic work. This party were under the general direction of Mr. J. F. Pratt, and while their field season was greatly curtailed because of the amount of stormy weather encountered, the results attained were most gratifying. They completed a coast survey chart of a large portion of the least known of the various bars and channels at the mouth of the Yukon, and the most important result of this chart was the discovery of a sufficient depth of water in one of the southernmost channels to permit the safe passage of ocean-going vessels. In consequence the trip by this channel shortens the distance between Yukon points and Pacific coast ports by several hundred miles. This party discontinued work in the late fall just before the closing of navigation by ice and returned to the Washington office to work up its results.

Cautious Criticism.

From the Youth's Companion.

Gov. Andrew of Massachusetts used to say that the negro was too shrewd to compromise himself, even when he was seeking information on a point of intense personal interest.

A gentleman from Boston was at a hotel in Charleston, W. Va., in 1859, during John Brown's hurried trial. In the early morning, before the guest had risen, a negro came into the room to kindle his fire. The excitement concerning Brown was then at its height, and the negro, knowing that the guest was from the North, naturally wished to get his opinion on the case. Yet he was not sure whether it would be safe to disclose his own views.

"Massa," said he, "yer hear 'bout dis man, John Brown, dey's tryin' hyar?"

"Oh, yes, I've heard about him."

"What dey goin' to do wid him?"

"Oh, they'll convict him."

"Cervict 'im. What den?"

"They'll hang him, sure as fate."

There was, as yet, no sign of the Northerner's sympathies. The negro waited a moment, and then asked, cautiously:

"Massa, wouldn't dat be a little abrup'?"

MISSION WORK IN AFRICA.

MR. NOBLE TELLS THE STORY AND SUMS UP RESULTS.

Successes, Failures and Mistakes in the Effort to Christianize the Pagan Continent —Bishop Taylor's Well Meant but Unfortunate Experiment—Salvation Army.

Men of all lands who are specially interested in Africa have long known that for five or six years Mr. Frederic Perry Noble of Chicago has been engaged in the preparation of a history of African missions. The results of his years of investigation of this vast subject will be published in a few days ("The Redemption of Africa," Vols. I and II., Fleming H. Revell Company), and the verdict of its readers will undoubtedly be that it is a most desirable and conspicuous contribution to the literature relating to Africa. The rise and progress of African missions, from the earliest times to the present, have been so intimately connected with almost every phase of the history and even the geography of the continent that no adequate account of missionary endeavor can fail to be the story of Africa itself, its exploration in which missionaries have ranked with the highest, the character of its peoples and the degree to which they are impressed by influences that make for all phases of advancement, the limitations imposed by climate upon progress, and the conditions and acts of men, good or bad, that the missionary spirit has helped to promote or to combat. In this sense Mr. Noble's work, while in every line devoted to the elucidation of his special theme, is a laborious, painstaking and able compendium of the whole African movement and of Africa itself.

In advance of the publication of the book the purpose of this article is only to mention a few facts from this rich collection of data which Mr. Noble has gathered from all reliable sources in many languages and countries. The list of authorities he has consulted fills ten pages, to say nothing of the hundreds of periodicals, reports of societies and works of travel which he has used but has not specified. Among the most valuable portions of the work are the bibliography of the subject contained in the list of authorities, the numerous footnotes and the statistical tables relating to all phases of African missionary work and results, which fill forty-eight pages.

Mr. Noble does not accept the view which many writers have encouraged that Islam is a great spiritual and state building force in Africa. The African conquests of Islam, though larger in area than Europe, cost nearly 1,300 years of effort, are more nominal than real and do not number one-quarter of the non-Christian peoples of Africa. Only along the east coast has Islam been able to cross the equator and remain there. Stanley predicted in 1880 that in five years there would not be a Mohammedan in Central Africa south of the equator, and his prediction came true. The author shows how the European powers are steadily shattering the hold of Islam in all the regions it has entered south of the Sahara; while in Egypt and North Africa European influence tames Moslem fanaticism. In the Sahara and Soudan Islam may survive for centuries, but the crescent pales and wanes, and the conquering days of Islam are over.

Americans have heard much of late years of self-supporting missions and particularly of the attempt in this direction made by Bishop Taylor. After Taylor had stationed his volunteers in Africa they were expected in spite of the pauperism, remoteness, savagery and tropical climate of that continent to support themselves and at the same time Christianize the pagan. Mr. Noble believes that there is truth in the principle of self-support under proper conditions, but that the results of Bishop Taylor's experiment demonstrated the impracticability of self-supporting missions in Central Africa. He gives some interesting facts not generally known about the Taylor enterprises. Between 1884 and 1898, 200 missionaries were sent out. Those sent to Liberia were compelled to refrain from regular school work till food could be raised, but at only three stations was there mention of a farm. In Angola and on the Congo a large part of the energy of the missionaries was given to the efforts to support themselves. When Bishop Hartzell went to Liberia in 1897 as the successor of Taylor he found that "the mission work of one church there is not what it has been represented to be." He ascertained that "the expenses of the stations were far beyond anything anticipated; many of the missionaries proved unfit; of eighty-eight persons sent ten years ago only twelve were in the field; of the fifty stations opened only twenty-five were said to be occupied; out of 45,000 coffee trees planted scarcely 15,000 had been saved, and the coffee sold would not exceed $200." Bishop Taylor's large plans, good man as he was, had miscarried, and his self-supporting missions in Liberia had cost about $100,000 and a great sacrifice of life.

The results of the Taylor missions on the Congo were still more unsatisfactory than in Liberia. The work began in 1883 cost $200,000 and fifty-eight missionaries were sent out. Only five missionaries were at work in 1888. Of eight posts founded, only Banana Point and Vivi were then occupied. The Anne Taylor, a steamboat that cost $75,000, was sold in 1898 for $3,000. Meanwhile other societies had pushed their work in the same sections and in regions beyond, some obtaining large results. Bishop Hartzell found that it was out of the question to renew Taylor's forward movement on the Congo, and so he withdrew entirely from that region, concentrating on Angola and Inhambani on the east coast.

The Angola experiences duplicated those of the Congo and Liberia. Bishop Taylor sent eighty-six missionaries there to stations between Loanda and Malanje between 1884 and 1898. He spent nearly $100,000 in this field. Eleven missionaries perished and fifty-one returned. The expectation of large returns from agriculture was not realized. The missionaries, after toiling for daily bread, could not work among the natives as they desired. No wonder that in 1897, after a survey of Angola, the Congo and Liberia, Bishop Hartzell said: "The results, as a whole, have been disappointing."

Mr. Noble presents an immense array of facts showing the practical value and usefulness of missionary effort in Africa when expended under wise direction, a fact that is recognized, as he shows, by all the leading workers in the African field outside the ranks of the religious societies. He tells the marvellous story of Uganda, where the first missionary presented himself twenty-one years ago, and the Christian agents, through wars and martyrdom, have moved forward till wonderful results of undoubted permanency have been achieved. The Protestant Christians there have built 27 large and 400 small churches and now have the whole Bible in their mother tongue. Seven hundred native laborers, all supported by native contributions, are in the field. It is intended to secure more and to have each hundred alternate between three months of evangelization and three of study. If the plan proves practicable it will finally result in the Ganda Church pushing northeast into the Galla country, down the Nile, into the Belgian Congo and toward Lake Tanganyika. However this may be, the Ugandan work of the Church Missionary Society of England stands on so solid a foundation that women as well as men now participate. The society has sent married couples and unmarried women.

Among the highlands of Nyassaland, north of the Zambesi River, the British missionary societies have also obtained most hopeful results. The church edifice at Blantyre is the largest in inner Africa and was built by native labor in three years. Buchman, a missionary gardener, introduced coffee, thus originating the coffee plantation of the present day. European flowers and vegetables fill Blantyre gardens. Two of the neighboring tribes have become bricklayers and carpenters and the Ngoni serve as laborers. A number of the young natives are now missionaries, and four periodicals in English are now published. The New Testament has been translated into eight vernaculars. Thousands flock to the schools, pay fees and purchase books. The negroes who twenty years ago would not work more than four days at a stretch, now bind themselves to a five years' apprenticeship to learn trades; and the cost of these missions is only $35,000 a year.

Many such facts showing what is being achieved for the native hand, heart and spirit between the Cape of Good Hope and the central lakes are given in these volumes, and with the impartiality of the competent historian. Mr. Noble does not shrink from telling the truth about missionary methods that are not commanded by common sense and experience. He believes that missionary work and industrial training should go hand in hand and does not approve the advice, often given to missionaries, to civilize the barbarian before attempting to Christianize him. Bishop Colenso, in South Africa, believed it necessary to civilize men before converting them. In order to demonstrate the truth of his hypothesis by the experimental method, he obtained a dozen Zulu boys, pledged himself to their families that no effort would be made to bias them as to religious matters, and had them indentured to him for a number of years. They made decided progress under the instruction given them. But when he appealed to them at the close of their engagement to remain and receive the instruction which he considered of far greater importance than all they had yet acquired, they left him and went back to their native life and costume. Their only gratitude was to leave behind their European clothes.

It may not be generally known that the Salvation Army has its corps in Africa. The army entered Zululand in 1888 and to outward seeming became Zulus. The workers go out on the understanding that they are never to return home and are to receive no salaries. The Salvationist must leave English dress and habits behind. The men wear red jackets bearing the words "Salvation Army" on the breast in Zulu. The remainder of their costume conforms as closely to native fashion as decency permits. Officers even discard English names and assume native titles. They beg from door to door, and so nearly are all the Salvation missions self-supporting that on an average these missionaries do not cost the London headquarters more than $24 a year. They are regarded as fakirs by the heathen and half their "converts" apostatize. In December, 1894, they numbered sixty-three stations and 104 workers in South Africa. The army appeals to the emotions rather than to the intellect and is a vast organization for revivals, and therefore backsliding and desertion occur far more frequently than in any other religious body.

The graces of Mr. Noble's literary style give an added interest to the important chapter of human history which he records. In the thoroughness of his preparation, his wealth of citation, the impartiality of his judgment and his predominant desire to tell nothing but the truth and to be "free from all suspicion of favor or malice" his work is modelled upon the highest plane of historical composition. He carries his narrative of African missions from their beginnings in the early preparations for the work through all their varying fortunes to the present day. He sketches their representative men, their religions, educational and philanthropic results, and statistically surveys the field, and, while his theme is African missions, so much of the best information about Africa in all its phases has very seldom been included within the covers of a single work.

THE TRANSVAAL MINES.

198 Gold Mines, but Only 28 Pay Dividends—The Diamond Industry—Coal Mining.

The report on the mining industry of the South African Republic for 1897 presented to the Volksraad gives remarkable details of the progress made in the gold mining in the Transvaal and the striking regularity in the yield of gold, hardly equalled by any other known gold fields. The capital of the 198 gold mines working at the end of 1897 was $363,883,750. Of these, 28 mines with a capital of about $50,000,000 paid $14,750,000 in dividends, or nearly 30 per cent. Sixty-four other mines were producing gold but paying no dividends, and some could not pay any without a considerable reduction in working expenses. The other 106 mines were in course of being opened up.

The total value of the gold yield in 1897 was $58,250,000, being $15,000,000 more than in 1896. Of this 66 per cent. was from crushing mills and 34 per cent. by chemical extraction. The quantity of ore worked was 5,741,311 tons, which gives a yield of a little over $10 to the ton, which, as the working expenses were about $6.62 per ton, left a net profit of $3.38 per ton. The working expenses in 1896 had been $6.83, and in 1895, $7.54 per ton. The total expenditure of the gold mining industry had been $45,250,000. As during the past year, so in 1897, the Transvaal Government refrained from levying the tax of 2½ per cent. on the yield, and as there is no income tax and no exchange or stamp duty is paid on newly issued shares, the gold mining industry does not appear to have much to complain of in that respect. The reduction of the price of dynamite by $2 and the lowering of railway rates contributed in increasing the profits.

There were, however, great losses made in Transvaal mining securities during 1897. These are attributed to the unscrupulous proceedings of promoters, who formed nearly 400 companies with a total capital of $300,000,000 in localities where no gold existed, and overcapitalized other companies to such an extent that dividend paying was entirely out of the question even if dynamite had been imported free of duty and coal carried to the mines free of charge. The profit paying capacity of the mines in general might be increased but for three causes, namely, the theft of gold from the works, the illicit sale of alcohol to the native laborers and the labor question generally, about 25 per cent. of the Kaffir laborers being constantly incapacitated for work. The scarcity of labor tells heavily against the economical working of the mines, and the premium of $15 to $20 paid to Kaffir agents to procure labor has only resulted in encouraging desertions of laborers from one mine to pass through the agent's hands to a brief service at another, when the process would be repeated. The Transvaal Government has done what it could, short of reducing the Kaffirs to actual slavery, to remedy these evils, but without much effect. It is estimated that the losses incurred through the causes enumerated amounted to the very considerable sum of $10,750,000, of which rather more than half was by theft. The total area of gold claims in 1897 was 251,659 acres, a large decrease on the previous year, due to the abandonment of worthless claims.

In coal mining there was considerable progress. There were twenty collieries at work, with an output of 1,600,212 tons, being an increase of 162,915 tons over that of 1896. The price fell, however, from $2.28 per ton in 1895 and $2.11 in 1896 to $1.88 in 1897, leaving but a small margin for dividends, that amounted altogether to only $287,500. The wages of the white miners range from $100 to $150 a month. Besides gold and coal, there is a small production of silver, lead and tin, not of much importance as yet. Diamond digging in 1897 yielded about 4,000 carats, and is likely to receive an impetus from the recent discovery of a field near Pretoria, which, it is hoped, may prove another Kimberley. At the time the report was completed 367 diamonds had been dug up, the largest weighing sixteen carats. The same difficulty, however, that hampers the gold and coal mining industries tells against the economic working of the new diamond fields.

An Inspector's Double Gets the Rake-Off.

"I have had more fun in seeing New York," said a Western travelling man who weighs 240 pounds and measures 6 feet 2, "than most men and for less money. I look like somebody on your police force. One day I was walking up the Bowery when I met a fellow who saluted me as Sergeant. The next day I went over to Mulberry Bend and two men hailed me as Inspector. One fellow rushed out and grabbed me and began to apologize for a violation of some sort and pleaded with me to give him another day. Of course I did not undeceive him. I try to do good, even in a great city like New York. I got a bit thirsty one day and went in a place somewhere on the east side and got a glass of beer. I threw down a quarter, but the fellow in the white jacket shoved it back. However, I insisted and he pretended to give me change, but it was two dimes and a nickel. I shoved the nickel back. Then I saw a penny-in-the-slot machine in the corner, where you get cigars for prizes. I played in a few coppers and lost. The fellow who was so generous with the beer stepped up and did something to the machine and I put in a few more pennies and got flushes, two pairs, aces and everything that won. But somebody on your police force is loser."

GLIMPSES OF MANILA LIFE.

THE DEFUNCT AMERICAN AND ITS ADVERTISEMENTS AND NEWS.

Couldn't Maintain Relations with the Military Authorities and Passed Away—It Revealed What the Soldiers Were Doing and Showed the Advent of American Ideas.

That considerable part of the population of Manila consisting of the American army and navy now situated in and around that place has been revelling in a local newspaper, printed particularly for its own consumption and in its own language. It revels no longer, for the *American*, flaunting under a very spreading eagle its double-barrelled motto "Equal Rights for All. Ten Cents Mex. per Copy," has been suppressed by the authorities on complaint of the German Consul. Some time before its suppression the editor announced that, owing to the unsettled condition of public sentiment and out of deference to the views of Gen. Otis, the space usually given up to editorial comments would be otherwise employed until such time as it might be deemed wise to print expressions of political opinion. Evidently he anticipated by too great a margin the good time coming, and the four pages of the *American* are at present in a condition of innocuous desuetude. From the copies received in THE SUN office it would appear that while it lasted the *American* typified a rather lively and extremely variegated form of existence in the tropics.

What first strikes the reader of the *American* is the large proportion of advertisements and the alluring words of many of them. The entire fourth page of the publication is given up to extolling the merits of a well-known American beer, the cooling effects of which are set forth with a nice art. A large proportion of the advertisements deal with liquid forms of refreshment. Consider the effect in a temperature of 100° of the following appeal to trained American thirsts made by a café patriotically calling itself the Olympia:

We mix the most elegant American Cocktails and Fancy Drinks to be found in the Tropics.

Whisky Sours,	Cocktails,
Golden Fizz,	Manhattan,
Silver Fizz,	Martini,
Whiskey Punch,	Anything you,
Roman Punch,	call for you
a Specialty.	will get.

Here is another, along the same lines:

G. Sterling has the pleasure to announce that he has just opened the long felt want, a First Class Genuine American Bar and Restaurant, and supplies the very best the Market affords. I have employed a Gilt Edged Mixer and am able to supply Martini, Manhattan & fancy American whiskey Cocktails, etc. NO. 1 ESCOLTA.

It was probably unconscious cerebration which led the editor to place on one side of these two announcements Señor Pedro Alario's tempting advertisement of "Stylish Funerals" and on the other side the following legend:

NOTICE:

I have a fresh and large stock of MEDICINES

Which are yours at popular prices. I am an experienced compounder.

J. Garrido

Botica de San Gabriel,

Rosario Street.—No. 1.

There are several "only American" restaurants in the city, one of which would hardly appear from its name to be as American as the average business firm in this country. This is "the only strictly American restaurant: Kwong On Tai & Co." The firm advertise Chinese cooks from the American fleet. The men of the North Dakota Regiment notify the public in several successive issues that they have opened a general store, thus indicating that the commercial spirit of the Yankee survives any attempt to smother it under a uniform. La Puenta del Sol announces a sale of goods "from 2 ct. up," where "American soldiers can buy Xmas presents for friends far across the sea." Some of the other advertisements that strike the eye are those of a "Boot Emporium," "Fine Grass, $4 per Horse, Monthly," and the prospective visit of a dentist from Singapore.

Social pursuits are not lacking in Manila. Wherever American college men are, though their alma mater be as widely divided geographically as the Atlantic and Pacific coasts, there will be the common bond of the Greek letter fraternities, and nowhere is this fellowship so joyously acclaimed as under foreign skies. Three of these societies gathered their men to reunions under notices in the *American*, Delta Kappa Epsilon, Phi Kappa Psi and Sigma Alpha Epsilon. The American university which is nearest of all to Manila, Leland Stanford, got its alumni together and held a reunion and banquet. Other organizations that renewed old ties in the Far East, as shown by the notices in the newspaper, are the Masons, the Independent Order of Odd Fellows, the Ancient Order of United Workmen, the Knights of Pythias, the Woodmen of the World, and, stretching from war to war, the Loyal Legion. Under this same general head of social amusements would perhaps come the note that "Companies K and D, First Colorado Infantry, entertained Dr. Rose Kid Beers of the Red Cross Society Thursday evening. Ice cream and cake were served."

Other and more public forms of amusement were not lacking. The universal cockfight of Manila has not yet come to the point of advertising in the American paper, but there are promises of joy in this:

"Don't forget the grand opening of Whaly's Casino to-day (Thanksgiving). It is situated on San Jacinto street, on the bank of the river, near the Spanish club. Superb music by native orchestra. The public are cordially invited."

There were similar promises which did not seem to be fulfilled in this:

"The Zaisser & Hurton Comedy Company will produce the five-act melodrama entitled 'The Baron's Victim' at the Filipino Theatre this evening. Through the courtesy of Gen. Otis passes will be extended till 11 P. M. for this occasion."

The *American's* dramatic critic fell foul of this performance in free terms:

"The Philippine Theatre was crowded Friday night to see the exhibition of the 'Baron's Revenge.' The revenge was awful! Children should not witness it. The effect upon immature minds will be life-lasting. The Red Cross was represented in the audience, and wisely, too, for many sick may be the result of the tragedy and perhaps valuable knowledge may be gained relative to the effect of mental excitement upon the physical well being of our brave but pleasure-loving soldiery.

"The audience was extremely critical, but as all were 'first nighters' the actors will not give undue weight to the delicately expressed criticisms, however sincere they may appear.

"One criticism often made during the evening was couched in the form of advice, of which the burden was 'put him in the guardhouse,' or 'give him a month and a month.'

"The fourth act of the tragedy was well worth the compliment of one's presence, and those persons who had received complimentary tickets should have been ashamed to demand their money upon leaving the theatre.

"In all, the performance was well worth the two hours 'Mex' spent, and any overworked person will probably find himself less worked here than at any other place of amusement in the city."

Sporting news is not lacking in the *American*, but it consists largely in accounts of field days and boxing and wrestling challenges. Here is a "defi" somewhat out of the common:

"Patrick Donohue, champion Irish reel, clog, and sand jig dancer of Colorado and Oregon, will wager $25 that for style and execution in any of the above named dances he can beat any soldier or sailor in Manila. If above challenge is not accepted within two weeks he will claim 'championship of Eighth Army Corps and Asiatic squadron.' Time, place and rules of contest can be arranged by application to Thomas Murray, Company B, Second Oregon Volunteers, Cuartel de España, Manila, P. I. No objection to contest on field day of any regiment."

There is, in the same column, a long and fervid defence by an enthusiastic partisan of a soldier and champion jig dancer named Moran, whose method had been harshly criticised, and unjustly, as his supporter alleges, offering to back his allegations with money. The majority of the sporting challenges appear to be for wrestling.

Of local news the paper has a rich and varied stock, most of which is culled from the provost courts. Here is an item which suggests that the genus cabby is the same no matter what his nationality may be:

"Basilio Villiana is a driver of a quilles and Signorita Castello is a charming young woman who hired the quilles for an hour's drive. At the expiration of that time she paid Villiana 50 cents, being 10 cents more than the legal rate. The man, however, demanded more money, and when he was refused he commenced to beat the lady over the shoulders with his whip. He struck one blow, but before he could strike another something struck him, and almost before he knew it he was landed in jail. He was fined $35 or seventy days. The court interpreter devoted an hour to explaining that it was not a typhon which caught him, but an American soldier in the Engineers, and the doctor's charges were included in the $35."

The following paragraphs, from issues of various dates, may serve to give an inkling of every-day life in Manila:

There appears to be several mean men in this city, but the police are gradually getting them corralled. One of the meanest of the mean men was up in the police court yesterday charged with assault. He caught his little brother in some childish mischief and tied the boy's hands and feet together, then belabored the lad with a club until he was black and blue. The Judge gave him $50 or 100 days.

Spolito Manabot, another mean man, was arrested by the police in the Binondo district for assaulting a blind man. The usual $50 or 100 days was awarded him.

A Spanish lady who went bathing on the beach yesterday had a quantity of money stolen from her clothing by Sixto Cristal, a native. He was caught and will have a trial later.

Cornelio de la Cruz, a bold pickpocket, was charged $50. It is a peculiar fact that a majority of the thugs of the city, when arrested, give the alias De la Cruz instead of their correct names.

J. E. Harney, a saloon man, had a "rough house" on the Escolta Tuesday evening and Judge Hamer yesterday fined him $10.

A man named Wickam, formerly in the employ of the American Commercial Company, went to a saloon on the Escolta Thursday evening and bought a quantity of champagne for himself and friends, valued at $94. It was charged. Now he is charged, and the police are looking for him.

Twelve native and Mongolian gamblers were awarded the usual $10.

Two natives were found guilty of reckless driving and fined $5 each. Esteban Papa was arrested Tuesday upon two charges, one for the attempted larceny of a pair of slippers and the other charge for assaulting the Chinaman, who objected to being robbed. For assaulting the Caino, Papa was fined $20, and for the attempted robbery was charged $5.

Thomas Aceno beat his wife about the head and shoulders, not only with his hands but with a club. The action of Aceno was, to say the least, ungallant, and did not show that chivalrous spirit for which the Spanish are said to be noted. His discourtesy will cost him 50 pesos or 100 days at hard labor.

Some notion of the various nationalities represented in business at Manila may be gained from the following names of advertisers, all taken from a single issue of the *American*: Pohoomul Brothers, Weingarten, Whaley, Lafuente, Wo Lee, MacOndray, Duka and Haggins.

BRITISH AGRICULTURE IN 1898.

A Favorable Year—A High Average Yield of Wheat—Diminished Imports.

The dependence of the British Islands on other countries for the bulk of their food supply, involving, as it does, the maintenance of an enormous navy at great cost, is giving rise to inquiry as to whether all is being drawn from the home soil for the maintenance of the population that might be. The total area of the United Kingdom is 76,729,491 acres, distributed as follows:

	Acres.
England	32,595,312
Wales	4,722,573
Scotland	19,083,659
Ireland	20,327,947

Of this acreage only 19,813,665 acres were under tillage in 1898, of which cereals took up 8,816,756 acres. Of this area but 2,158,479 acres were planted with wheat, an increase of 219,523 acres over that of 1897. The rest were given up to the production of barley, oats, rye, beans and peas. Green crops, such as turnips, mangels, vetches and rape, occupied 4,261,482 acres, while clover and rotation grasses covered the considerable area of 6,210,851 acres. The remaining 524,506 acres were divided into 155,364 acres of flax, hops and small fruit and 369,202 acres bare fallow. Permanent grass lands covered 27,978,809 acres, more than one-third of the total area of the islands. On comparison with 1897 there was a decrease in the tilled land of 130,178 acres and an increase of the area under grass of 54,039 acres. One remarkable fact is the steadily decreasing area of potato cultivation in Ireland. It was only 664,912 acres in 1898, against 804,508 acres in 1888 and over 1,000,000 in 1871. The area under flax in Ireland was also considerably reduced. The acreage of hops was less than that at any time during forty years past, and the yield the lowest, with the exception of two seasons, during the last fourteen years. The greater part of the British imports of hops come from Germany, principally Bavaria. The orchard area is placed at 226,059 acres, an increase of 1,943 over 1897 and of about 12,000 acres over 1894; but the yield was disappointing, chiefly owing to the ravages of insects.

For one thing the year 1898 will be noted in the annals of British farming; that is, the high average production of wheat per acre, the highest since 1884. It was 34.74 bushels per acre, against an average of 29.16 during the previous ten years, in which the highest yield was 33.68 bushels and the lowest 25.95. The yield of barley was also the highest per acre recorded since 1884, having been 35.75 bushels per acre; and oats, which gave 40.76 bushels per acre, only once exceeded that yield, which was in 1894, when it rose to 41.61 bushels. The official return of the total production of these several cereals was: Of wheat, 74,028,856 bushels; of barley, 68,051,918 bushels, and of oats, 118,920,917 bushels.

The high yield of wheat was not, however, the only gratifying feature of the year 1898 to the British farmer. The average price of wheat was the highest, with the exception of 1891, when it rose to $1.11 per bushel, having been $1.02. There was a great gap still between that price and the money paid for a bushel of wheat in 1898, when it fetched $1.91 per bushel. But the most remarkable thing about the home wheat market during the year 1898 was the wide fluctuation in the weekly average prices, which amounted to no less than 68 cents per bushel.

As was to be expected from the increased area of land given over to grasses and pasture, there was a considerable increase in the number of cattle, sheep and pigs in the United Kingdom in 1898 as compared with 1897. The totals given in the official returns are: Cattle, 11,149,212; sheep, 31,102,359, and pigs, 3,719,819, being increases of 145,173 cattle, 535,298 sheep and 36,400 pigs over the numbers in 1897. There was, however, a decrease of agricultural horses to the number of 29,522 as compared with 1897, when the returns showed 2,080,852 head. That figure, again, was a decrease by 45,286 compared with 1893. The diminishing number of horses employed in agriculture is attributed to increasing application of machinery and steam power in the multifarious operations connected with the cultivation of the land.

The average price for barley in 1898 was the best during the last seven years, but a long way under the average of the price during the thirteen years previous to 1892. In 1898 it was 81 cents per bushel; in 1879 it was $1.02. Oats sold higher than in the previous four years, but under the average of the fifteen years previous to 1894. In 1898 they sold at 55 cents per bushel, while in 1880 the average price was 69 cents.

On the whole and compared with more recent years, that which has just passed was not a bad one for the British farmer, but he has a great deal to do before anything like the comparative prosperity of twenty years back can be hoped for. A good deal of attention is being given to the experiments that have been carried on by two English farmers during the last few years for the improvement of the yield of grain by cross-fertilization. The results already achieved are remarkable. Varieties of wheat have been produced which give grain on an average 50 per cent. heavier than that of the ordinary wheat; and it is believed that the new varieties of wheat and oats can be made to yield 30 or 40 per cent. more than the existing varieties. Extraordinary results have also been attained by greater intensity of cultivation on small allotments. Instances have occurred where the yield of wheat has been at the rate of over seventy bushels per acre, just double the average in the United Kingdom in 1898. From these facts it is apparent that a good deal can yet be done to raise the production of food in the British Islands to a higher level than it has yet reached. In the one article of cheese something has already been done as a result of the adoption of better methods and more economical management. The immediate effect was seen in the falling off of the purchases of Canadian cheese last year to the extent of about $2,000,000, and there is little doubt that, with the extension of the factory system now being adopted in England for the making of butter and cheese and the greater use of green forage crops as substitutes for hay, the importation of the foreign-made articles must diminish, as it is doing in the case of those coming from the different countries of Continental Europe.

FRENCH BALL NOT GAY?

Description of Himself After It That the Professor Recognized Instantly.

All the experts on such subjects declare that the recent French ball was the most mournful occasion of the sort that this city has ever seen. Somehow the experts always talk that way the day after the ball. They look as if they were sincere, too. But there are exceptions. One of them is an estimable individual of great renown as a student of natural history and mankind, whose gentle ways and steady application to his life work has brought him a wide circle of acquaintances in this city and in Albany. He began to tell another man the other day about the ball.

"Why," said his friend, "you weren't there. I was there and I saw everybody, and I didn't see you."

The professor looked grieved and glad. "I'm sorry you doubt my word," he said, "but I'm glad you didn't see me. You must have come very late."

"I did," said the other man. "I was very late. I didn't start until 2 o'clock, and then, just as I was crossing the park on my way to the Garden, a fire engine came squealing and snorting up Twenty-sixth street, spitting fire, smoke and steam and spilling chunks of live coal as big as my two fists at every jump on its way up Madison avenue."

"Why, man," said the professor, with a gasp of recognition, "that was I."

HEAD-HUNTING IN SAMOA.

WAY IN WHICH NATIVES MEASURE THEIR VICTORIES.

The Custom Is Ancient and Is Carried On as Amiably as Its Nature Permits—Samoan Clubs Replaced by White Men's Knives—Biblical View of the Subject.

Head-hunting, although about the only English word for the thing, is a decided misnomer when applied to the Samoan procedure. The Samoans are not at all head-hunters in the same sense as the Dyaks of the Malay Seas, who set out on expeditions of which the distinct aim is to gather heads, and carefully dry the heads they have taken by suspending them in smoke until sufficiently preserved to ornament the family rooftree.

The Samoans take heads only incidentally, merely to serve a temporary end as a measure of victory. After the heads have served this purpose they are never dried and hung up for ornament, but may be had on application by the next of kin of the former owners. It is a very ancient custom of the Samoans, if one may repose confidence in the tellers of stories; but as the custom is not found among the other Polynesians of the Pacific there seems reason to believe that it has sprung up among the Samoans since the period of their great dispersion six or eight centuries ago. Be that as it may, the custom certainly antedates the first coming of the white men, for, living in ignorance of metals, the islanders fashioned a peculiar type of club which their experience proved possessed distinct advantages for purposes of decapitation. The heading clubs had a thin but deep blade and were made of very dense wood, which would take an edge and not easily chip through the common accidents of its use for this particular operation. An essential feature of the type was a sharp and rather long hook or spine recurving from the tip of the blade along its back. This was designed for carrying the severed head and gave this class of clubs the name "nifo oti," "the tooth of death." Since white men brought forges to the islands the specialized club has been replaced by a long-handled knife or hanger very much like the familiar machete with the addition of the hook at the end, which is an essential. The old name still clings to the steel heading knives, which between wars serve as dancing favors or toys for the official maid and the official beau, who are part of the social state in every Samoan village. At the dances and the frequent parades and processions of Samoan life village maids and village dandies take a conspicuous part in juggling these long and dangerous looking implements of a special purpose in war.

Samoan battles scarcely deserve classification as a hazardous risk. They are fought for the most part at rather long range and with uncertain aim. Not many warriors are wounded and still fewer are killed. If too many on any one side are found to be getting hurt that side scampers away out of danger. Whenever possible the vanquished try to remove their dead from the field. The wounded may be left behind with perfect confidence. They will be in no danger of violence at the hands of the conquerors. But the slain represent a different aspect of battle. It is no shame to a Samoan fighting man to run away, but the victor will lose all his pride in victory unless he has a good tale of heads to show for it. No Samoan would attempt decapitation of a living and objecting person; but as soon as it appears that the enemy is wavering in battle and is likely to retreat, then a furious attack is made, both to turn the signs of wavering into rout and so to annoy the fugitive army that it will be prevented from carrying away its dead. As soon as the victors find themselves securely established on the field of battle they hunt for the enemy's dead and promptly chop their heads off.

The severed heads are carried about the camp with ostentatious parade, and finally laid before the leader of the war party which has taken them. After serving as the visible proof of victory, which they can do in a high degree, inasmuch as every head is perfectly well known by all who see it, the severed heads have no further use. As soon as night has fallen a stream of women from the camp of the vanquished begins to arrive, and their errand is to reclaim the heads of the slain. They are cordially received and entertained, for Samoan warfare is only skin deep after all; they have no difficulty in securing the heads which they have come after, and unmolested they set out for the camp of their party, carrying the heads in cocoanut baskets. The heads are assorted out to the bodies with which they were formerly associated, and both are buried in some convenient spot, which after the return of peace will be marked by a cairn of rock decorated with empty bottles turned bottom up.

There is a law of the Samoan Government providing dire penalties upon those who chop heads in war. The Samoan Government is very docile, under the prompting of the white officials in Apia or of others whom it desires to encourage. The parliament of native chiefs will pass any law suggested to it and will assign Draconian penalties for each and every infraction, but it should be understood that these and all other laws of Samoa are to be taken in a purely Pickwickian sense and are not intended for use. Just about the time of the last previous Samoan war somebody in Apia thought it was not seemly to carry heads on poles through the streets, particularly on steamer day, when it might give tourists an erroneous impression of the country. The Samoan Government politely passed the law forbidding the practice and all but exterminating the practitioners. In the briefest possible space of time after the passage of this law the native lawmakers were foremost in jeering at the King, Malietoa Laupepa, who had to be dragged out to see the heads of the conquered foe and was sick for a week afterward.

There is one thing as to which the Samoan is set to the last edge of obstinacy. That is the Samoan custom. That is never open to argument, debate or alteration. Samoan fashion is good enough for all Samoans. If it is absurd they will grant the absurdity, but they will continue the practice. When a Samoan can bolster up a Samoan custom by chapter and verse from the Bible it is idle to think that he can be moved from his position. The question was put to one of the best of Samoans whether she approved of the custom of decapitation. The woman could speak English well. She had travelled widely, and in the course of her travels had spent considerable periods in Australia and the United States. She was happily married, and seemed to bear much affection toward her good-tempered giant of a husband. With all this, her only answer was that it was the custom of Samoa, and that what was good enough for Goliath and John the Baptist was surely good enough for the Samoans.

LETTERS ON A THEATRE TICKET BOX.

Fifteen Years Old, but Mr. Hoyt Was the First to Discover Their Meaning.

Fifteen years ago, when he was advertising agent of the Fifth Avenue Theatre, Charles Welch purchased a ticket box to be used at the door of the theatre. He divided the box into four compartments, cut a slot in the corner for each and marked them as follows: A, for admission tickets; B, for balcony seats; O, for orchestra chairs, and X, for passes. This separation simplified the nightly count.

During the past fifteen years Mr. Welch has been with many theatres, but has always carried the box with him. It has received many coats of paint, and although now somewhat antique in appearance, Mr. Welch declines to discard it for one of more modern appearance. For years it has done duty with Mr. Welch at the door of the Madison Square Theatre.

Some time ago Charles H. Hoyt, the playwright, walked into the theatre, looked intently at the box through his glasses, and then remarked:

"I'd never know it was one if you hadn't put that sign on it, Charley."

"What's gn, Mr. Hoyt?" said Welch.

"Why, look at it," said Hoyt.

"Well," said Mr. Welch in relating the incident, "I looked at the letters over each slat, and here is what I read: A, B O X. I'd had that old box for fifteen years and I never noticed the coincidence before. If all the letters were on a line I might have noticed it, but the A and B slats are alongside of each other, and under them the O and X slats. I used to think I was an observing man, but I don't mind saying that this discovery has taken away my conceit."