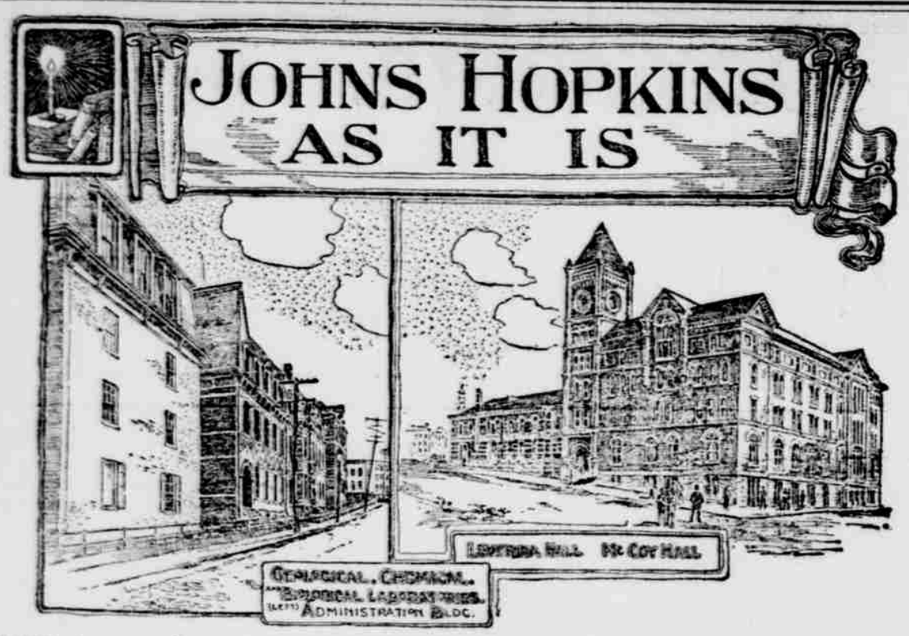


RUMORS of an approaching quarter-centennial celebration at Johns Hopkins University determined me to go and see what manner of place it might be. That it was a post-graduate institution I knew, and that it was preposterously learned. But there my information ended. Therefore, I and my good friend Thomasina—best of traveling companions—betook ourselves to Baltimore. Our first walk brought us inevitably to Monument Square, center and soul of the venerable city's life. Strolling up Monument street in search of an approachable person to direct us to the university, we came to the conclusion that nine-tenths of Baltimore's population were men, and that nine-tenths of Baltimore's men were young. Not a petticoat appeared.

It was Thomasina, of course, who, wearing her second-best smile, accosted a youth in a doorway with, "I beg pardon, but can you direct us to Johns Hopkins?"

"Ladies," he replied, his eyes twinkling irrepressibly as he lifted his hat, "you're right in it."

"What? Where?" gasped Thomasina, wheeling to look about her. Big, dull red brick buildings with round, brownstone arches, stood flush with the sidewalk on both sides of the street. The youth indicated these and included vaguely all points of the compass, and replied, "Oh, all about here. Were you looking for anything in particular?"

Looking for the University.

"We were looking for a university," quoth Thomasina with reproachful emphasis. "We thought these were the Y. M. C. A. Where is your campus? Where are your dormitories? Where are your Greek Letter Societies?"

"Well," he said slowly, "the campus used to be at Clifton, about two miles northeast of here. There isn't any more. We don't live in dormitories. There aren't any Greek Letter Societies."

Thomasina shrugged her shoulders with a what-do-you-mean-by-it expression. "How do you know your buildings apart?" she demanded.

"We don't," said the young man imperturbably, "except by situation. Herewith he pulled out and handed to Thomasina a pocket university directory, bowed and went his way.

"Gracious!" gasped Thomasina, with a shiver, "to think of stumbling into Johns Hopkins without knowing it! Let's get right out of this university!"

More easily said than done. We tried Garden street and Ross street, only to encounter windows lined with rows of bottles, with male heads bent over them. Howard street and little Ross street were still collegiate. "The idea," sniffed Thomasina, "of a university all tangled up with a city in this unprincipled fashion! Where are the immemorial elms? The antiquity?—the atmosphere?"

Antiquity and Atmosphere.

"Antiquity, in an institution just celebrating its 25th anniversary? Nonsense!" protested. "As for atmosphere, if you could step inside that chemical laboratory you would find plenty of it." I was wrong; for approved ventilating hoods and flues have made Johns Hopkins' chemical laboratory the least sulphurous in Christendom. But how was I to know that?

Arrived in our peregrinations at the door of McCoy Hall, we went in under the carved Romanesque archway, to the office of the president. Having held the chair of chemistry ever since the university opened, Dr. Remsen has not relinquished it even now when the whole burden of the institution has fallen on his efficient shoulders. But you never would have fancied him a busy man as he settled down to consider our case. He suggested that we make the grand tour of the buildings, seeing Johns Hopkins with our own eyes. So, provided with a sheet of cards of introduction, we were bowing ourselves out, when Thomasina, hitherto becomingly silent, raised her voice. "I believe," she said distinctly, "that your most distinguished product is Richard Harding Davis."

The president strangled a smile, murmuring something courteous about the "point of view." I bolted into the passage to hide my confusion. Richard Harding Davis indeed! Shades of Johns Hopkins!

The charge of the architectural barrenness we retracted in the shining oaken corridors of McCoy Hall, newest and finest of university buildings. We caught a glimpse en route of the leonine head of Professor Paul Haupt, of Polychrome Bible fame. Thomasina said she never had supposed he was real. Through literature and language "seminaries," big audience-halls, and splendid reading-rooms, we prowled, and so came again to the street, and over the way, to the chemical laboratory.

In the Great Laboratory.

The professor who showed us through said it was not a show laboratory; and perhaps from the standpoint of pure beauty it was not. But light, air, working space, water power and electricity were unstinted. As for apparatus, they have everything that's to be bought, and also some that isn't, for the machine-shops are by no means the least important part of the university.

Thomasina, whose idea of chemical experiments was confined to brief operations ending in a pop and a mess, was overawed by the scope and seriousness of the work going on in dozens of little private laboratories, where graduate students were industriously transforming themselves into Ph. Ds. The infinite patience which keeps a man pegging away for a twelvemonth upon one circumscribed investigation, with the chance that in the end they may write over against his work, "Results purely negative"—was beyond her ken. I am afraid she joggled out of a half-hour's work a Ph. D. who doing delicate chemical weighing, determining thousandths of a gram with the help of a beautiful balance and little fish-scales for weights which would be disqualified for immediate use by the moisture of your finger-tip. He gravely took the temperature and consulted the barometer before he went to work, proceedings which we were inclined to regard as a huge joke. But it seems he meant it, there being a difference betwen culinary and chemical standards of exactness. Our guide told us that many a time when he had important experiments in hand he had worked with the balances through the dead of night, till the clock, striking four, set in motion again the rumbling city carts, sending disconcerting vibrations through his delicate instrument, and putting a period to exact work. That's the price Johns Hopkins pays for her city site.

Some Practical Results.

We said we would like to see some practical results of so much pure science, and to know what becomes of the pure scientists, turned out by Johns Hopkins every year. In response they showed us a series of books full of samples of beautiful rainbow-hued cloth. Those colors, or rather, the dyes which make them, they said, are the result of the sweat of the chemists' brains. They mean the most abstruse mental operations, the most strenuous puzzling with the relative geometric positions of unthinkable atoms in space. The big German dyers have in their employ dozens of illustrious doctors of philosophy, who think in colors, determining by their machinations with coal tar the hues in which society shall array itself from generation to generation. That is one of the many commercial fields open to the theoretical chemist. Most Johns Hopkins men, however, go to satisfy the demands for "Hopkins graduates as professors in the colleges and universities of the land."

We found the geological laboratory mixed up confusingly with the weather bureau and the Maryland geological survey. That is because Dr. Clark, director of the laboratory, is also clerk of the weather and chief of the survey. Advantage in plenty accrues both to university and state from this partnership. The students get between three or four months actual field work every year, and earn a little money. The state, on its side, gets the unpaid labor all Winter, of a body of 30 or 40 trained men. The university values the relation, too, for the close touch it gives with the people. Geological hunting-parties scrape acquaintance with the farm folk; and the department's function as identifier of "specimens" brings them into relation to all sorts and conditions of men.

Wonder Tales Come True.

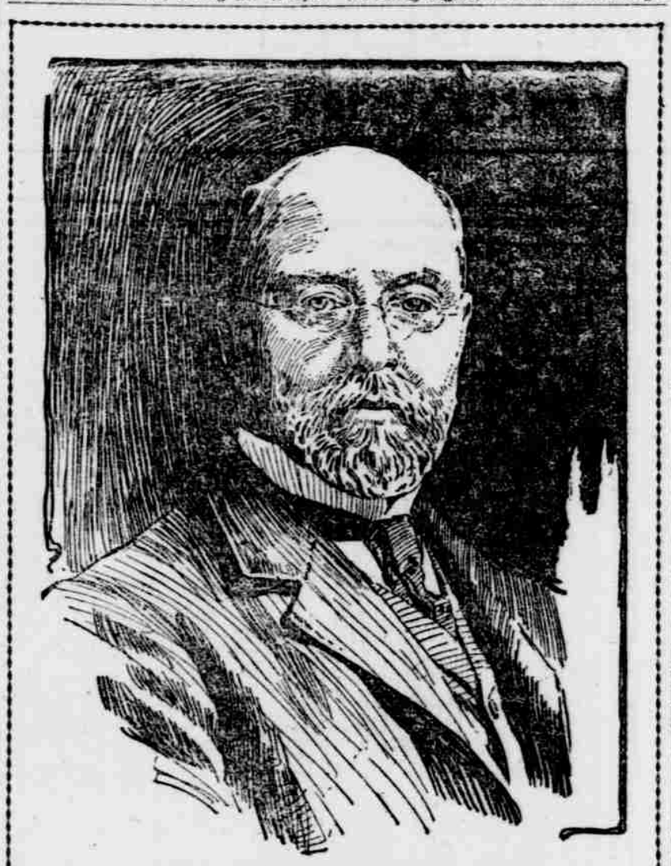
Wonder tales came true inside the physical laboratory. We saw a solitary worker spinning crystal thread finer than the most attenuated cobweb. Fusing two bits of quartz in a Bunsen flame, he suddenly drew them apart. Holding the delicate thread, spun between the crystals in the flame, he blew it across the room. The filament, scarcely visible, was not fine enough to suit the student, so he fastened one end of it to a little arrow, fitted it to a bow and shot it at a target. Capturing the delicate thing, so fine that it now floated in the air, he made it fast to a glass frame and scrutinized it critically against the light. Behold, there were flaws in the filament and he began all over again. He wanted it to suspend a delicate weight in a very particular piece of apparatus. It must be fine enough, long enough, strong enough and totally without inequalities. We left him still juggling.

Down stairs they took us into the darkroom where Dr. Rowland, who has recently died, made his marvelous photographic map of the spectrum. A whole year he spent in testing preparations of photographic plates, before ever the work of making negatives was begun; three years it took him to complete the series of maps, the most exact in existence. Thomasina was beginning to look distinctly bored, when the professor put into her hand a little three-inch box, telling her to open it. She did, and almost dropped it in her surprise. The little box contained a sublimated rainbow, as pure and as melting as the veritable "bow in the sky" and infinitely brighter. It was one of Dr. Rowland's famous diffractions gratings—shame to call so beautiful a thing by so unbeautiful a name! Nowhere save at Johns Hopkins are these perfect gratings made; for nowhere else in the world are there instruments exact enough to make them. A grating is a polished concave square of tin and lead alloy, scored with absolutely parallel scratches, absolutely the same distance apart, and 20,000 of them to the inch. A slip of one-millionth of an inch, and there are "ghosts" in the spectrum—the grating is worthless.

Thomasina, holding the blaze of color in her hand, said she thought she would take one. "Certainly," said the professor gravely, "have you $100 about you? The university sells them at that price."

Making a Perfect Screw.

We gasped, and the professor hastened to explain that while Professor Rowland succeeded in making a perfect screw for the ruling engine, it is still difficult to get diamond points the right shape to do the scratching. So there are still many spoiled gratings, and good ones come high. We wanted to see the wonderful machine at work. The professor hesitated. It seems the thing is so delicate that it is kept in a vault at constant temperature. The admission of our little vital furnaces might raise the thermometer and spoil the grating. However, just for a second, he let us in. There was the machine, working under glass. A thousand-toothed wheel revolves one cog; the screw turns a fraction of a revolution, carrying the polished metal which is to be a grating forward an imperceptible bit; the diamond point passes over it, leaving a scratch. So on, until if no accident befalls the diamond point, a perfect grating is brought forth.


PRESIDENT IRA REMSEN, JOHNS HOPKINS UNIVERSITY.

At the Medical School.

Everybody said we must see the Medical School, so one fine day we made the trip to East Baltimore to Johns Hopkins Hospital, and the medical laboratories. They are very proud of their medical school, partly because it is still so new that the other institutions of the land haven't had time to copy it. In other matters of research they have set the pace for the whole country, and now their imitators are saying: "Why are not we as good as Johns Hopkins?" But the Medical School, with its requirement of a college diploma for admission, is still head and shoulders above competition. Harvard, indeed, has this year followed suit. The rest are yet to follow. Beside the obvious advantage of its post-graduate requirements, Johns Hopkins Medical School is blest with the unusual relation it bears to Johns Hopkins' Hospital. Although on separate foundations, the institutions are practically one. Two of the laboratories are on the hospital grounds. The superintendent of the hospital and many of the staff are members of the medical faculty. Students work in the wards, attend clinics, serve in the dispensary. Practically all the instruction of the fourth year, and much of that in the third, is given in the hospital. Woman is permitted to squeeze inside the medical school, because the endowment of the Woman's Memorial Building was made on those terms.

Place for Original Research.

So much for the visible Johns Hopkins. I cannot close without speaking of less concrete things. In its 25 years of existence Johns Hopkins has by its insistence and original research changed the very complexion of American university education. Its press has maintained nearly a dozen technical journals of the highest type. As it stands looking into its second quarter-century, there is hope that it may soon change its adequate, but unmonumental housing for an architectural setting worthy of it. Mr. Wyman, of Baltimore, stands ready to give the university a magnificent site on Peabody Heights, if only $1,000,000 can be raised to go with his gift. The money is a little slow coming, but it will surely come. And when the university is built there will be no mistakes. Johns Hopkins has built its present shell layer by layer; it knows precisely what it wants and how to get it. It will not expand its undergraduate department. The authorities have no wish to see the serious graduate student body swamped into a horde of irresponsible, prank-playing undergraduates. They prefer rather to smother the spirits of the undergraduate in academic gloom. They will, it is safe to predict, indulge again in scientific expeditions like those to the West Indies, which have been intermitted for lack of funds; they will add to the already generous equipment of the university extension courses; will make Johns Hopkins more than ever superlatively the place in all America for original research. They told us that they are always loaning to other institutions volumes of the rare old technical journals of which they have complete sets. We asked if there was not danger of losing them. "But," said they, reproachfully, "there is more danger that somebody won't get what he wants." That is Johns Hopkins all over. Given a really adequate endowment, and along lines of research at least, everybody will always "get what he wants."

MARY BRONSON HART.

IN FIELD OF POPULAR SCIENCE

EPITOME OF WHAT IS GOING ON IN ALL PARTS OF THE WORLD.

THE following rules, prescribed by the San Francisco Health Board, must be obeyed by all barbers, and a copy of them hung in every shop:

Mugs and shaving brushes shall be sterilized by immersion in boiling water after every separate use thereof. Razors shall be wiped with alcohol before and after being used. Hair brushes known as "sanitary brushes" must be used after first being sterilized. Razor strops must be kept clean, and never wiped off with the hand or blown upon with the breath. A separate towel shall be used for each person. Barbers shall not blow away with the breath any hairs after cutting, but use a towel or brush or hair brush. Barbers shall keep their finger nails short cut and clean. Alum or other material used to stop the flow of blood shall be so used only in powder form and applied on a towel. The use of powder puff, finger bowls and sponge is prohibited. No person shall be permitted to use any barber's shop as a dormitory. All barber's instruments must be disinfected after using.

The Moving of Trees.

A natural forest can now be placed around a house while it is building. Trees of one to two feet in diameter, and even larger, are successfully transplanted. First a circular trench having a radius of 15 to 20 feet is dug around the tree. The roots are then undermined and the earth knocked from between them with a light, blunt pick. As the roots are loosened they are tied in bundles which are drawn by cords towards the tree's branches. As much weight of earth as can be handled is left around the tap root. The tree is then drawn over until its trunk rests in a truck cradle which has a lifting jack under it. If it is to be more than a day out of the earth the bundles of roots are wrapped in wet burlap or straw. The hole into which the tree is to be put is partly filled with soft mud and the trunk is held upright by guy wires.

Automatic Signals to Ships.

An automatic system of signaling has been devised which will warn ships of their approach to dangerous rocks and coasts in all weathers, when even a flashing light might not be seen and the booming of a fog horn be unheard. A metallic conductor is fixed on an elevation ashore or a lightship or reef or lighthouse. From this etheric waves are transmitted over a zone which has a radius of seven miles. All vessels within that area which are fitted with receivers are warned of their proximity to danger, the distance and the point of the compass being registered. At the same time a bell rings and the receiving instrument records the name of the place that is being approached. The automatic part of the invention consists of steel bearings with a number of teeth which pass over a Morse transmitter. No operators are needed. The instrument or machine works absolutely automatically. In its elementary principles the system resembles Marconi's method of wireless telegraphy, but in detail the system is essentially different.

Measuring a Stream.

The method used by the engineers of the Nicaragua canal survey for determining the amount of water handled by a stream was both simple and satisfactory. A rope which carried a car on a trolley was stretched from bank to bank and the car moved by a windlass on shore. Two gauges occupying the car measured the depth of the water at intervals of 10 feet, and the velocity of its movement was taken by submerging an electric current meter at six-tenths of the measured depth for 100 seconds. The width, depth and velocity of each section were multiplied together and the sum of all the sections found. This gave the amount of water conveyed by the stream. These measurements were taken at high and at low water below each tributary and at other points.

The rainfall was determined by setting out bottles each containing a funnel the area of whose top had a known relation to the capacity of the bottle. At the western end of the route there is no rain from January to May, but in the wet season five to six inches of water may fall in a day. Evaporation tests were made in pans three feet square by two feet deep. The amount of sediment, principally silt, carried by a stream was determined by dropping into it from the car heretofore mentioned, a tin box one meter square by eight inches deep whose upstream side hung on a hinge. This was left on the bottom a given time, the hinged side was then closed, the box taken ashore and its contents measured.

The intervals at which the elevations of surface were taken along the route were not more than 100 feet—in order to secure acurate profiles. The work was done by 150 engineers and 455 laborers.

Mushroom Culture in Paris.

Nearly all the mushrooms consumed in Paris are grown in the disused quarries which honeycomb the country to the south of the city. Some of these excavations are of enormous extent and might properly be called mines, for they have horizontal galleries or levels at various depths; but usually they have only one gallery, some 300 yards to half a mile in length, and from 50 to 150 feet below the surface. These galleries are generally from seven to ten feet in height. They are in most cases wide enough for two rows of beds, with a footway 18 inches wide down the middle.

These old quarries are chosen for mushroom culture for three reasons: Because mushrooms can be grown in them all the year round; because they can be had cheap and because the mushrooms are believed to be superior in flavor to those grown in the open air. From two and a half to three tons of these cave-grown mushrooms are sent to market every day, and the total value of the trade is about $2,000,000 a year. Stable manure is the only soil used.

Regulating Trusts in Germany.

The Central Association of German Merchants and Industrials, at Berlin, has petitioned the Bundesrath (Council of the Empire) and the several German state Governments to prepare a draft of a law to be presented to the German Parliament, providing that all commercial associations of a monopolistic character, in the form of "cartels," syndicates, rings, trusts, etc., organized for regulating prices or production, division of territory, or for other purposes), must be registered by law and have their articles of association approved by the respective authorities; also that they must furnish, semi-annually, statements of their financial conditions, and of their profits and losses, which shall be published, if not otherwise, at least in the Reichsanzeiger, the official publication of the German Federal Government.

Industrial and Scientific Notes.

In Germany potatoes are largely used for making alcohol.

All the beet-sugar factories of Denmark form one trust.

Three-fifths of the world's sugar is now made from beets.

The number of trusts in Germany was five in 1870 and 345 in 1897.

An automatic frost alarm is in successful operation at Sacramento, Cal.

The beet-sugar factories now furnish 10 per cent of the sugar used in the United States.

During last year the loss from depreciation of bank shares in Germany was $476,000,000.

Greece has sold to the United States up to the present time this season $1,000,000 worth of currants.

In Great Britain the control of trade by trusts is so nearly universal that it has ceased to excite comment.

The Financial Chronicle says that $2,500,000,000 in new securities were made and sold during 1901, eclipsing all previous records.

The temperature of the sun is estimated, after 10 years spent in observation and calculation by Professor Wilson, of the Royal Society, to be 11,192 degrees Farenheit.

Siberia is rich in coal and iron. It is estimated that 5,000,000 tons of iron can be made from them annually for 200 years.

A fire alarm whistle at Cherryville, Kan., which is unique in that it is blown by natural gas, is pictured in the Scientific American.

Sugar is now the most highly protected article in the United States. The duties are more than double the average of the Dingley tariff.

Mr. Marconi, who already has the Order of the Crown of Italy, has now been decorated by the King with the Order of St. Maurice and St. Lazarus.

The locomotive works of the United States, exclusive of the railway shops, turned out last year 2384 engines, of which 337 were sold in foreign countries.

California produces more prunes than any other country in the world. The orchards cover 73,000 acres, and the annual crop is about 150,000,000 pounds when dried.

It is learned, by experiment, that the danger of combustion in coal stored in a vessel's hold may be obviated by injecting sulphur dioxide gas into it and then battening down the hatches.

One of the earliest trusts was the steel rail trust, formed in Austria in 1873. Since that time the number of Austrian trade combinations has increased until it embraces nearly every kind of manufacture.

As an evidence of the improvement in transportation facilities on the Great Lakes it may be said that in 1870 the rate per ton of freight from Minnesota to Ohio ports was about $3 50. It now varies between 60 cents and $1 per ton.

Of the horses and mules bought in the United States by Great Britain there were shipped from the port of New Orleans 75,991 horses and 67,669 mules. The value of the animals was $13,843,052, and food for them cost nearly a million dollars.

The Berlin Tageblat says that the commercial depression in Germany "is vividly illustrated by the fact that in Berlin 180 firms in the foundry, machine and electro-technical industries have appealed to the Prussian Ministry to give them work at the bare cost of production, in order to spare them from the necessity of further discharging their employes."

All the stenographers who have passed the very rigid examination for the Government service have been immediately appointed. The number of qualified applicants for positions both in the United States and the Philippines is insufficient to the demand.

The height of the average criminal, as shown by the large number of Bertillon measurements, is 2.7 inches less than the average of the male population, and his weight is 17.8 pounds less.

Canada imports from the United States in considerable quantities only the higher qualities of manufactured goods. The largest purchases are made in hats, shoes, shelf hardware and farm implements.

The inability of the shipbuilders of the United States to compete with those of Europe depends entirely upon the higher cost of labor in this country. Although materials are cheaper, wages make the cost of a vessel per ton of carrying capacity 20 per cent greater than in England or Germany.

The widely printed statement that the export business of the United States is diminishing, the value of shipments aggregating in value for 1901 $12,000,000 less than those of the preceding year, should have coupled with it the fact that $30,000,000 of trade with Porto Rico and Hawaii, which item appeared in the statement of exports in 1900, is in the total for domestic trade in 1901.

A German investigator has shown the beneficial influence of electric currents upon the growth of plants. Electrodes are put in the soil at different sides of the plant and a direct or intermittent current sent through the soil from an external source, or a zinc and a carbon electrode were placed at opposite sides of the plant, and connected by a wire, so that a short-circuited cell was formed.

The Canadian Niagara Power Company has startled electrical engineers by ordering generators of 10,000 horse-power—double the size of any previously made. The order is placed in the United States, however, although the engineers are Swiss. The company will have 30,000 horse-power in current, to sell, and the nearest ready market is Toronto, 80 miles distant. This need not dismay, for in California the transmission of 40,000 volts' pressure over 200 miles is a commercial fact.

Railway automobiles are beginning to be considerably used in Europe. As early and late trains, on branch lines, and others where passengers are few; on trunk lines where it is often difficult to secure convenient secondary trains; in industrial centers and city suburbs. The automobile train can be attached for a certain distance to an express and detached at the station where the road branches.

The Government is ready to employ an efficient draftsman of almost any special branch, and examinations are constantly being ordered to secure eligibles. For the past year or so there has been a shortage in the number of unemployed draftsmen. The commission has held no less than three different examinations in the same subject within the past nine months, and every man who passed has a position.

The camphor tree is an evergreen, and belongs to the same genus as the tree whose bark furnishes cinnamon. In the same class is the sassafras of the United States. It is a native of Eastern Asia, and is one of the noblest trees of that section. The average tree is from 40 to 60 feet in height. It is grown as an ornamental shade tree in Southern Florida, but not to furnish gum for market.

The Italian Government will not permit a strike on the railways, since a railway strike affects so many public interests that it does not come in the same category of ordinary workers. The Government will, however, investigate the complaints of the workmen, to see if there is anything which needs to be remedied by legislation, and if it finds that treatment of employes is unwise, will endeavor to have the companies make such voluntary changes as the state finds desirable.

During the 40 years since the first train robbery the average annual amount of booty secured has been $150,000. It is estimated that the average number of men in this profession is about 20. This, then, shows a large annual income for train robbers.

In all the placer mining districts of British Columbia and the Yukon territory large amounts of platinum and kindred metals have been thrown away by miners who did not know the value of the product. With the present price of platinum it would pay prospectors to be on the lookout for it. Platinum is not found in ledges, so far as is known, excepting in one place in the world, but in black sand containing a large percentage of magnetic iron ore and a varying quantity of gold.

The presence of the pipe in public in Paris is not anything like as marked as in England. The French still regard this mode of consuming tobacco as infra dig.


FINE SPECIMEN OF A KADIAK BEAR.

MAKE ALASKA GAME PRESERVE

APPEAL TO CONGRESS FOR PROTECTING THE GREATEST HUNTING GROUNDS IN AMERICA.

TODAY Alaska contains the grandest hunting grounds in North America. They are inhabited by the giant moose, the largest antlered animal inhabiting the earth; the Kadiak brown bear, largest of all flesh-eating land animals, and the mountain caribou, largest and finest of its genus. The snow-white mountain sheep is there, the mountain goat, black and yellow bears galore, and the rare, new glacier bear, as yet never seen in captivity, and in only one museum.

All these fine animals are being slaughtered by sportsmen, hidehunters, headhunters, and Indians, who, in true Indian fashion, kill often five animals for every one that they properly consume. In the United States statutes there is not one line of game law, either to protect the game of Alaska, or restrict its slaughter in any manner.

Nature has been millions of years in developing the wonderful animal forms now inhabiting our Arctic province, but which foolish and short-sighted man is now thoughtlessly exterminating. Unless quick and effective measures are taken by Congress, the next 10 years of slaughter will wipe out the work of ages, and leave Alaska only a barren, lifeless waste of rugged mountains and dreary tundras. Already the western side of Alaska has been almost cleared of large mammalian life.

The favorite haunts of the grandest game of Alaska are not, and never can be, adapted to the wants of the husbandman. So far as known, they contain few precious metal deposits worthy of mention. Those rugged, rocky crags and peaks never will know the wire fence and the cowboy. Those mosquito-ridden, water-soaked tundras invite the wild goose and sandhill crane, not the plow and harrow.

Economically, there is no reason why Nature's great natural gameland in Southern Alaska should not be fixed and established for all time as a National game preserve, and made a heritage for generations yet unborn.

We of today have no right, either moral or legal, to destroy all the zoological resources of Nature, and hand over to our grandchildren a world destitute of wild life. The resources and the beauties of Nature are an entailed heritage, which it would be criminal in us to destroy.

What Is Our Duty in Alaska?

The answer is very simple—the logical sequence of existing facts. As if disposed by Nature to make easy the task of preservation, a narrow strip of coastwise territory in Southwestern Alaska, extending from the head of Bristol Bay around to Yakutat Bay, is today a natural park, stocked abundantly with the grandest wild animals now living in North America. This region is the home of the giant moose, caribou, Kadiak bear, white sheep, mountain goat, glacier bear, black bear, ribbon seal, and a host of smaller forms. It is inhabited by a very small number of Indians and Aleuts, and a very few white traders and hunters. Congress should pass a law creating of this territory a National game preserve, and providing for its effective protection and regulation, on about the same general lines as the Yellowstone Park. If it is found advisable to permit a limited amount of hunting under Government license, let the law so provide. The interests of the natives can be conserved, but no Indian that ever trod moccasin or bootleather ever again should be permitted to slaughter big game at will. Their shameful work in Western Alaska shall never be repeated in the South. The sale of breech-loading firearms to natives in that territory should be stopped immediately, before it is too late.

The interior boundary of the game preserve which I have the honor to propose should, for reasons too numerous to state here, be as follows:

Begin at Nushagak, extend along the Nushagak River to its confluence with the Malchatna; thence along that stream to where it crosses the 155th meridian of west longitude; from thence in a direct line to latitude 52 degrees and longitude 153 degrees, which point is north of Tyonek, and distant therefrom 80 miles; thence eastward along the 52d parallel of latitude to where that parallel crosses the Copper River; from thence to the summit of Mount St. Elias, and the head of the northeasterly arm of Yakutat Bay. This reservation includes the whole of the Alaska and Kenai Peninsulas, Kadiak Island and Afognak Island, but no other islands.

There are many reasons why the boundary and the areas included in the preserve should be as above, and neither more nor less. It is not claimed, however, that the remainder of Alaska should be left without game laws—far from it!

But that is another matter. This area is clear-cut, easily protected and as yet well stocked with wild life. It contains all large species found in Alaska except the polar bear.

In the preservation of a grand series of North American types it is the line of least resistance, and the shortest and surest road to a result. It can be made to serve as a great reservoir for animal life, like the Yellowstone Park forever overflowing and stocking the regions around it.

A bill providing for a National game preserve in Alaska, on the line proposed, will immediately be introduced in Congress. If it receives sufficient indorsement from game preserves it can be passed at this session. All persons who are willing to aid in securing its passage can do so by writing to their Congressional representatives in behalf of the "Alaskan Game Preserve Bill," and they are requested also to communicate with the undersigned at the New York Zoological Park, stating their views on this subject.

WILLIAM T. HORNADAY.

The Bugle Song.

W. D. Nesbit in Baltimore American.

He went away to the war that day,
To the swinging bugle song;
All stanch and true in his suit of blue,
And sturdy, brave and strong.
'Mid the tramp of feet and the loud drum beat,
And the ringing of the cheers,
There were none to see such a one as she
Who could not see for tears.

And back again came the marching men,
With the bugle singing still;
Yet the music's surge was a sighing dirge,
All sad and slow and shrill.
For a woman wept; and a soldier slept
In the dreamless, silent sleep;
And the bugle song had a measure wrong,
For the buglers sometimes weep.

And the bugles' lure while the years endure
Will coax them into line,
And the lifting strains on the hills and plains
Still echo fair and fine.
But the suits of blue, and the sabers, too,
And the worn and battered caps,
Will tell some maid what the bugle played
When it sighed the song of "Taps."

A Woman's Love.

To Admiral Dufferin, from his wife.

When another's voice thou hearest,
With a sad and gentle tone,
Let its sound but waken, dearest,
Memory of my love alone.
When in stranger lands thou meetest
Warm, true hearts which welcome thee,
Let each friendly look thou greetest
Seem a message, love, from me.

When night's quiet sky is o'er thee,
When the pale stars dimly burn,
Dream that one is watching for thee
Who but lives for thy return.
Wheresoe'er thy steps are roving,
Night or day, by land or sea,
Think of her whose life of loving
Is but one long thought of thee.