WEALTH IN BLACK SANDS.

Report of Geological Survey on Investigations of Deposits in This Country.

The geological survey has issued a supplementary report on its investigation of the black sand deposits and promises further information as the work progresses. It was not understood when the work was started how widespread the demand would be for tests and information nor how valuable the sands would prove. But it has developed into a work of magnitude and importance.

Dr. David T. Day of the survey has had charge of the experimental work from the start. The survey has so far examined about one-third of the deposits in the United States, and managed to keep up its work on the Pacific coast about six weeks longer than the appropriation was expected to run the party. Since the first report on the work was made, the investigation has been principally confined to the examination of large collections of concentrates collected by the survey and contributed by various mining companies. Beveral of the by-products of the sands will doubtless be commercially valuable. Inquiries have been addressed to several of the consumers of these articles, and it has been found that there

will be aready market for them. Monazite from the Pacific beaches contains various percentages of thoria, used in the manufacture of incandescent gas mantles. Zircon is also found exceptionally pure, and is available for the same purpose. Chromic iron ore has been experimented with in the manufacture of refractory furnace linings in California. No previous use had been found for ilmenite, but on receipt of samples at certain eastern manufactories it was found that it was adaptable to certain electrical purposes. Its utilization from the black sand depends on favorable freight rates, and these are being sought. Magenite has been found, and is manufactured into satisfactory pencils for arc lights, and also has been successfully used in steel manufacture.

It is thought that the next urgent deficiency bill will contain a provision for continuing the work.

CANADIANS AND AMERICANS

Difference in Modes of Living and Doing Business of the Two Peoples.

Writing of the differences between Canadians and Americans a correspondent says: "The differences are mostly of degree; the superb self-con-Adence of the average American woman, as she walks abroad, the licensed pbtrusiveness of children, the perpetual degeneracy of conversation into story-telling-these characteristics are less marked in Canada than in the states. In fact, Canada presents as sub-American variety of civilization, though in some ways rapidly assimilating to the states. Physically the Canadian seems to be a sturdler stock of heavier build, slower moving and less nervous than the American. This is particularly applicable to the women, whose movements and conversation are quieter, and who are without the hunted look in the eyes which marks so many Americans.

"It may be that the colder climate exercises some moderating influence, but probably the chief explanation of these differences lies in the fact that bred; there are few large cities, and even the dwellers in these cities keep up a more constant contact with country life. Nowhere in Canadian cities does one see the profusion of luxury and waste visible in New York or Chicago; though most persons seem to live in fair comfort, there is no class of millionaires dominating 'society' and making the form and pace for servile imitation among the less wealthy

"Hunting and fishing, with their accompaniments of camping out, play a large part in the national life, sport not having degenerated into the meremost Canadians are country born and ly gambling and spectatorial habits. Altogether the Canadian lives a healthful life. Even busy cities like Toronto and Montreal conduct their business life more quietly than cities of correspounding caliber in the United States."

Marriage Licenses Abridged. Consul Conant, of Windsor, reports that the secretary's department of the province of Ontario is endeavoring to prevent the issuing of marriage lirenses at frontier points in that province to persons from the American side, which is a flourishing business, particularly at Windsor. The attorhey general has recently handed down an opinion that such licenses should not be issued. In general the ruling of the attorney general is that the licoenses should not be insued to people who are not bonn fide residents of the province, and the provincial secretary's department will try to enforce this ruling. License issuers and ministers on the frontier will naturally suffer financially, and those at Windsor to a greater extent than others.

Greatest Floating Dock. By the end of 1997 the port of Hamburg will possess the greatest floating dock in the world. It is now under construction at Hamburg, and is to have an accommodation capacity of 35,000 toms. Its length will be 520

feet.

Medical Congress. A congress of medical men is soon to be held in Paris to devise means for nutting a stop to the illegal competition of "witch doctors," bone setters, faith healers, and every kind of mediADULTERATION OF FOOD.

Convictions for This Offense Have Been Numerous in Germany.

Consul General Guenther, of Frankfort, reports that during the year 1903 3.091 persons were convicted in Germany for adulteration of articles of food. In 1902 the convictions were larger, a decrease of six per cent, being noted for 1903. The largest number of convictions occurred at Berlin, where an increase from 598 in 1902 to 645 im 1903 is shown. For producing and keeping for sale and consumption unwholesome articles of food 748 persons were convicted in 1903, against 394 in 1902. This large increase is due to the effects of the inspection law of June 3, 1900. In Berlin 59 persons were convicted for violating the provisions of this law, against 29 in 1902. For knowingly violating the rules with reference to animal epidemics, especially those for the prohibition of imports to prevent rinderpest, as well as the regulations to prevent contagion in the transportation of animals by railroad and for the willful use of articles liable to spread contagious diseases before disinfection, \$31 persons were convicted, against 1,-173 in 1902, showing a decrease of 20 per cent. For knowingly violating the regulations for preventing the spread of infectious diseases 59 persons were convicted, against 67 in 1902.

NEW RULES OF ARITHMETIC

Queer Difficulties Encountered by Mathematicians of a Generation Ago.

Parents who tempertake to assist their children in the preparation of their school lessons encounter some queer difficulties, says the New York Press. Long division, for instance, presents stumbling blocks that trip up the wisest minds of a generation ago. In that benighted age youthful students of arithmetic were taught that in an example in long division the divisor was placed at the left of the dividend, the quotient on the right, while the remainder was written at the end of the quotient. Old fogies who have dropped hepelessly behind the times now attempt to introduce those antiquated methods when tutoring their offspring. but the youngsters scornfully correct them.

"Oh, that isn't right," they explain. "You must put it down this way." Then, according to present-day instruction, they put the quotient above

the dividend and set the remainder in the little crook on the right formerly occupied by the quotient. Before these eccentricities of modern education the parent sits amazed and helpless, trying to prepare himself for the next innovation, which will probably be to make the figures upside down.

FASHIONS IN HARNESS.

Horses of the Present Day Not Tricked Out as in Former Times.

Probably not half a dozen horses are comparisoned to-day as they were 20 years ago, says Country Life in Ameria. Harness in this country then was listinctly American in type, as was the horse of a decade earlier, but if that harness, whether for gig or carriage were to be seen on the drive or in the park to-day it would be greeted with supreme ridicule, although it was then considered the proper thing. Whatever may have been our opinions then, we now know what is right. It was only a matter of education and we were apt scholars. A score of years ago the horse show descended upon us and found us with good native porses and poor native harness. It was apparent to all beholders that something was wrong, and when later one or two animals were shown in English harness the "something wrong" was plainly understood. A great change was needed, which was no sooner recognized than made, and to-day, with the exception of the dress of the speedway horse, the English type of harmons is used everywhere.

MOST COSTLY LEATHER.

That Made from Walrus Hide. Which It Takes Years to Tan.

"We have had," said a dealer, "walrus leather two inches thick, such being worth about \$500 a side, bringing, as it does, \$2.50 a pound.

"It takes four or five years to tan a walrus hide of that thickness. If the hide is not thoroughly and perfectly tanned the raw strip left in the middle will turn as hard and smooth as iron.

"It takes two or three years to tan inch thick walrus, and the leather of that thickness calls for \$1.25 a pound. three-quarter inch walrus, bringing 76 cents a possid by the side.

"Walrus leather is used chiefly for polishing purposes by manufacturing jewelers. It is cut into discs, which are mounted as wheels. Walrus is a durable leather and it is especially defirable in this use because it polishes without scratching."

Analysis

"Micky, wot is a philant'ropist?" "Well, it's like this-if I were to swips a quarter from ye when ye wasn't lookin', an' den offer to give ye a dime, if ye'd promise to buy a toot'brush wit it, I'd be one of them things."--Life.

The Division. Edgar-In winter the ice man has my sympapthy. Oscar-And the coal man your money.-Town Topics.

KILL MOOSE FOR PICTURES

New Brunswick Guides Bewail the Desecration of Canaan Woods.

Cantan woods have been desecrated. the guides and residents of the province believe. They have been opposed to the invasion of hunters, but when a moving picture machine was brought into the sacred preserves of the woods they felt that all bounds had been passed.

The Canaan woods, a vast tract in the heart of New Brunswick, probably contains more moose than any other tract of the same extent in the world. Some weeks ago a party came here from Boston in a private car and there was much speculation concerning the uses of a queer looking machine that formed part of the outfit. Dr. Heber Bishop, a railroad man, of Boston, who has visited the Canaan woods regularly for several seasons, was the leader. of the party, and with him were R. E. Follett, head of the New England Fish! and Game association; C. Everett Johnson, F. T. Marion, artist, and G. W. Bitzer, of New York, and Harrie B. Coe, of Boston.

"Must be one of them Gatling guns." said Charley Coates, viewing a strange piece of apparatus. Charley's opinion was accepted and loud murmurs of protest arose, until it was explained that the strange thing was a moving-picture machine. The party proceeded to Jim Ryder's camp, far back in the woods on one of the lakes.

Mr. Follett and Mr. Johnson spent one night in a crows' nest calling moose. About daybreak one of the guides hurried into the camp with the news that moose were answering their calls. The picture machine was hurried out to the crows' nest, but Johnson and Follett had already gilled a 1,200-pound bull, measuring 54 inches across the antiers. They went through the motions of killing the huge animal again for the benefit of the picture machine.

Dr. Bishop had even better luck; he was paddling in a birch bark canoe with two guides when a moose came swimming toward the craft around a point. The picture machine happened to be set up on shore, and an excellent picture of Dr. Bishop killing the animal was taken. This was his twentyeighth moose. A mile of film was exposed, making between 40,000 and 50,-000 single pictures.

QUEER PARISIAN RESORT.

Restaurant Where the "Arboreal" Tendency of Man Is Catered To.

A shrewd but unscientific person once complained that Darwin had omitted fro mhis "Descent of Man" one of the principal facts which would support his theory of an "arboreal ancestor," and that was the inherent propensity of mankind to climb trees, says the New York Tribune.

Whether this proclivity shows descent from some simian ancestor who "nightly climbed his family tree, and on the top reposed," one may leave Darwinians and anti-Darwinians to deside, but the fact that "Robinson." the extraordinary Paris suburb of dwellings and restaurants in trees, has existed for over half a century, and still flourishes, may be taken as proof that

the mania for tree climbing endures. "Robinson" was discovered in the year 1848 by a man named Guesquin. It was then a wild and unfrequented spot, seven miles senth of Paris, and a mile or two from the pretty little villages of Sceaux and Fontenay-aux-Roses. A lane ran along the side of a hill a little below the summit, and was bordered by a huge elm and chestnut tree-an odd corner of the great forest which once encircled Paris for many

He bought some land thereentirely for his own benefit, and not for that of his rare guests, nailed beams to the largest limbs of the stateliest tree on his tiny estate, some 30 feet above the ground, and on these erected a summer house reached by a wooden stair, where he could sit of an evening to smoke his pipe and enjoy the lovely view of the Seine valley.

Being hardly more than a couple of hours' walk from the great University of the Sorbonne, it chanced that a student who was taking a walk one Sunday afternoon found out the spot, was pleased with it, and came again, bringing some of his comrades. They in turn told others, and in a few weeks Guesquin's aerial restaurant became a favorite resort of the collegians.

Pulque Brandy.

Pulque brandy is described as a diabolical decoction from a species of cactus that if left on a desert island by itself would raise a riot. Fortunately for civilization, this flery potion has not become an article of commerce, but is distilled and drunk by low-grade Mexican half-breeds and renegade whites of old Mexico, who can lay claim to a useful place in nature only by exterminating each other.-Portland Oregonian.

Salt Beef Barred, Indicative of the radical changes that are being made in the British navy is this recent statement by the admiralty: "No more contracts for supply of sait beef have been entered into, as it has been decided to abolish this article of diet." Cold storage takes the place of the beef barrel.

Touched Him. "Did that magnetic healer do you

good?" "Yes, he did me good and plenty; merely touched me, and made me give "p five dollars."--Houston Post.

TRAITS OF INHERITANCE.

In Books as Well as in Life There Are Certain Strong Family Resmeblance.

One may imagine an artist attempting, on a wager, to paint a landscape without using a single tone of yellow, let us say, or blue, says Frederic Taber Cooper, in the Bookman. In the same way one may imagine a novelist writing a story of a man and a woman, so detached from the outside world, so silent regarding their ancestry, their past lives, their present surroundings, so nearly a record of two naked souls, that heredity and environment may be said for once to be eliminated. But such a picture, such a story, would be a mere tour de force, not an honest transcript from life. Every landscape must contain, in varying degrees, some yellow and some blue. Every human story must concern itself with traits inherited from our fathers or acquired through the company we keep.

And the novelist to whom his characters are a living reality, men and; women whom he thinks of as having an existence outside the pages of his book, needs no promptings from Darwin in order to make us recognize, the ties of blood and of propinquity -any more than the photographic lens needs to be prompted in order to show, in a family group, how the father's eyes, the mother's lips are mirrored back in the faces of son and daughter.

It is not venturesome to say that in some of our best English novels. in "Belinda" and "Emma," in "The Newcomes" and "The Mill on the Floss," there is often more heredity than Miss Edgeworth or Miss Austen. than Thackeray or George Eliot were conscious of putting there. Take any novel of the first magnitude, in which a whole household is described, three generations of genial, kindly gentlefolk, the sort of family that it would be a privilege to know in real life. One of the granddaughters, let us say, is the author's chief concern, and the whole book revolves around her personality.

Now if the book is based upon an intelligent observation of life it is not a vital matter whether the author has worked out the heredity for you, like logarithms, down to the tenth decimal. You are free to work it out for yourself, to trace the heroine's qualities, good and bad, back to their various sources; to conjecture about her many things which the author never once mentioned, perhaps never even thought of. In books, as well as in real life, there are certain family resemblances that are never noticed until pointed out by some comparative stranger.

THE OLD, OLD STORY.

But the Night Grew Suddenly Chilly and the Love-Making Was a Frost.

Slowly they walked in the twilight -he and she, writes C. W. Taylor, in the Chicago Tribune. He was no longer in the heydey of

youth.

Time, however, had laid light hands upon him. So had his barber, but oftener and more artistically, and he was well groomed.

She was a rare and radiant maiden, known to the regular frequenters of Spotcash & Co.'s great emporium of trade as the girl at the robbon counter. "Miss Mildred," he said, with a sort of premonitory cough, "let us suppose

"A case of what kind, Mr. Matewer?" she asked. "Notions? Or remnants?"

"Let us not talk shop, Miss Mildred. If 'case' suggests business I will vary the phrase. Let us consider a hypothesis." "A what?"

"A hypothesis. A hypothesis is a supposition, an assumption, a postulate, a working basis, or an idea taken for granted, for the purpose of laying a foundation, establishing a proposition, or demonstrating a fact. Get the idea?"

"O, yes; anybody can understand that. Is there more of it?" "There is. Some day, my dear girl, you expect to marry somebody."

"Is that the hypo-hypo-" "No; that is one of the eternal verities. Every pretty girl expects to marry somebody. Here is the hypothesis: Suppose some man, slightly past the blooming period of youth. but well preserved, in full possession of health, strength, and all his intellectual faculties-"

"A hypothesis is a man, is it?" "He's a necessary part of this one. Suppose some such man as I am describing, not at all ill looking, and possessed of a reasonable share of this world's goods, should fall wildly, madly, desperately in love with you. Miss Mildred-" "Well?"

"And offer you his hand and heart -do you think you could learn to love bim?"

They walked along a block or two in silence.

Then Mr. Matewer spoke again. "Feels a little as if it were going to snow, doesn't it, Miss McGinnis?" he said.

Strong Argument. Worcester, England, has refused to give the government a site for a cavalry barracks, though one of the city councilmen used a strong argument. He urged that the presence of 1,500 solders in town would end the prevailing scarcity there of female domestic servants.

Edition hobdo madair y \$8.00.

IN THE SCHOOL CITY.

Workings of a New Experiment in the Self Government of the Young.

The writer was present a few weeks ago when the first school city was organized in Boston by Wilson L. Gill, the inventor and founder of the system, writes Frank Pearsons, in Century. There were 700 pupils, all girls of the grammar grades. They were delighted with the plan, voted unanimously and enthusiastically to adopt the Golden Rule as the fundamental law of their school city, supplemented it with various provisions against disorder, destruction or injury of property, profanity, rudeness, unkindness, etc., and showed remarkable discretion in the election of their officers.

The mayor was a bright-faced girl of twelve and a half years. When asked, shortly after the election, what it meant to her to be mayor of Hancock school, she said: "It means to see that every girl is orderly, clean and good. It means that they must have good conduct. They must be clean and neat in their dress and habits. They must keep the schoolrooms and the school yard neat. And they must be kind to everybody."

That is a great task. Aren't you afraid of it?" The answer was prompt and clear: "No, for I think they are all good

citizens' Mary Finn, the judge, said: "I shall warn citizens who don't behave, and if that does no good I shall punish them. They must behave."

The whole discipline of the school is put into the hands of the pupils. The teachers give instruction, and advice when it is needed, and the ultimate responsibility and authority are always with them. But the students make laws and really govern themselves, although there is an authority above them, just as a grown-up city governs itself, although the legislature may at any time revoke its charter.

In fact, there is more real self-government in these school cities than in most of our large cities. For there is no apathy in the school city, no stay-at-home vote, no political machine or boss.

There is no graft in the school city no boodle on the council, no "under standing" between the police and wrongdoers. The ten-year-old judge and the twelve-year-old mayor are absolutely incorruptible. Habits of good citizenship are formed while the mind is plastic, open to the full force of considerations of right and justice and free from commercial motives and other influences that in later life so often interfere with the duties of citizenship. The love of liberty is strengthened and ennobled by recognition of the rights of others and the necessity of mutual limitations for the public good. Respect for law and authority is developed. The sense of justice is strengthened and the judicial attitude of mind is cultivated.

The results have been excellent in every way. Anth conduct and scholarchip are greatly improved. Disobedience is pulled up by the roots. Public sentiment ranges itself on the side of law when the public makes the law. A breach of order is no longer regarded as a defiance of an alien government, but as an injury and an insult to the community. Even the most disorderly schools have been reduced to good conduct by the institution of the school city.

Breaking the Trail. Winter in the mountains is severe in its restrictions. Sledging and travel ever the snow-banked trails are limited to bare necessity. In the colder seasons the trails are kept open by shoveling and packing them down. When the runners sing intermittently in high, thin voices, the teamster, with a belt tight around his overcoat and flopping his arms to keep warm, faces his greatest hardships. But when the beavy snows and rapid thaws of spring come, teaming means a battle and a venture with a sudden termination hanging just above. Thousands of tons of snow up the mountain sides hang on a trigger that can be aprung by the sigh of a breeze or the rolling of a pine cone, and in summer many a barren slope and pite of rock and timber at the bottom tells a skeleton-tale of the winter's night. Floundering, swearing and persevering opens the trail-a little ruffed thread of white from up above, but a hard day's work for a man. --- Outing.

Curious English Almshouse. The most curious almshouse in

England is St. Mary's Hospital at Chichester. There eight old ladies live setually in the church, which is a fine old building dating from 1680. It was originally a monastery, but when Queen Elizabeth came to visit there she turned it into an almshouse, to endure as long as almshouses exist. The old ladies have two neat little rooms each down the sides of the main church, with windows looking out on the garden. They have each a coal supply, a kitchen range, water and gas. At one end of the church is the chapel, where daily services are held. The choir stalls are beautifully carved old oak, the original seats that the monks used. The church stands in a quiet little square.

Last Addition. "This flat is so fearfully small," complained the applicant. "Do you think we could get enough breath in it to live on?"

"O, yes!" said the agent. "It is thoroughly provided with compressed air."-Detroit Free Press.

CHAFING DISH "BLUFF."

Concoctions Always Cooked Before They Are Brought in from the Kitchen.

The waiter placed the chafing dish carefully on the table and removed the cover with a flourish. It was a very ornate chafing dish with silver lobsters holding up the bowl, and the lamp was ornamented with crabs and fishes and other denizens of the deep, says the New York Globe. "I wish he wouldn't take away the cover," complained the girl who prided barself on her acquaintance with the saucepan. "I like things well cooked," and she stirred the savory mess with a big spoon and turned up the fiame of the ornate lamp. The waiter approached with a cynical smile and informally, familiarly, perhaps even a bit impertinently, he said: "It's thoroughly cooked, miss. Was cooked before it left the kitchen. That dish is just a bluff. If we served things half cooked the restaurant if would be boycotted in a week. Every one thinks he can make things in a chafing dish and likes to turn the lamp up and down and stir the contents of the dish, but not one in a thousand that orders these things could cook them It's all a bluff. The chafing dish is very good to keep a thing hot and-I think the rarebits ought to be served in them, but it's all a bluff as far as restaurant cooking is concerned. The stuff that's served in them is not cooked in a chafing dish either before or after it reaches the table."

And then the girl, with as much dignity as she could command, served the crab-meat and deftly heaped the green peppers at one side and the mushrooms at the other side, and tried to look as if she didn't know the waiter was within a hundred miles.

SOUTH AFRICAN HORSES.

Nine-Tenths of the Animals That Are Now Sold Are Raised by Kaffirs.

South Africa is foreseen as achieving its destiny by becoming one of the great horse producing countries of the world. At the present time the man who would dabble in horse flesh needs both experience and courage. The Kaffirs provide nine-tenths of the horses sold. When a dealer arrives in a native territory he sends round word that he has come to purchase horses and the natives roll up with all sorts and descriptions of the equinine tribe, which for the most part are of no earthly use. The man picks out an animal and the owner names an exorbitant price, which he never hopes to receive, the dealer offering a sum which no sane man could acrept. But eventually a price is agreed on and the owner receives a written order for the amount, which he redeems in the evening by coming to the dealer's botel and receiving cash Br easy stages a descent is made on the next purchasing site and by degrees a decent sized troupe is got together. When these arrive at their final destination their original owners would not recognize them. They have been clipped on the way down, had a few condition powders and had a general cleaning.

ROME WITHOUT A DOCTOR.

For Six Hundred Years the Empire Was Minus Physician.

According to Pliny, Rome finurished for 600 years without a doctor. It is maintained by some, however, that when making this statement Pliny was not aware that certain Greek physicians resided in Rome, at least during s part of the period named. But there is certainly no question that in the early days of its history, physicians were very scarce in Rome, and doubtless because there was little occasion for their services. With the advance of civilization maladies have multiplied and with the increase of disease there has been a proportionate increase of physicians. There are at the present time in the United States not less than 150,000 physicians, and the number is increasing at the rate of several thousand annually. Whether or not the world is better for this great multiplicity of medical men is a question upon which there may be a difference of opinion:

Colors in Glass.

Changes in the color of glass are caused by subjecting it to the action of what are known as ultraviolet rays of light. Something of the same sort may be observed on high mountains, where old glass from bottles originally green, after exposure to the light of a great elevation in the regions of perpetual snow, attains a beautiful pale purple tint. The same result may also be seen in connection with the glass, insulators used on telegraph or telephone lines in mountain districts.

- 74 Hub. "What makes Skribbler walk so.

chesty?" "Why, man, that fellow used to conduct the 'Through the Looking.' Glass' column on a paper down in. Indiana. If you look close you'll see, a cute little halo around his head i when his hat is off. He knows Riley and all those big guns by sight. Why shouldn't he walk chesty?"-Milwaukee Sentinel.

He Meant Well. "I meant to start off the new year by giving the first woman I saw standing up my seat in the street car. But I didn't do it."

"Old habit too strong, ch?" "No; I couldn't get a seat to give her."-Cleveland Plain Dealer.

L'ABEILLE DE LA NOUVELLE-ORLÉANS Let très expandes en Legislans et fans tous les Brate du Bude de publishté affre donc au commerce les avantages exocotionneus. Prix de l'abonnement sur l'anné : Beitiers Ouvildieune El 2.00