The AUTOMOBILE

How Gasoline Performs Best.

The fuel we feed our human bodies must be readily digestible to be nutritious; the fuel we feed our engines must be equally digestible to be effective. That is the gasoline must evaporate readily; it must be volatile so that it will quickly become a vapor and mix with air in explosive proportions in order to produce energy and power.

This is what an expert on gasoline states in the official publication of the American Automobile Association. His article continues to discuss the subject as follows:

"Do you realize what happens in your engine when you put your foot on the gasoline accelerator?

"Well, think of your carburetor in terms of a medicinal atomizer, the kind you use to spray a sore throat; because the carburetor atomizes the liquid gasoline into an air stream. This air stream passes into the engine at a high velocity, and as it passes through the carburetor to the engine it must mix with air in explosive proportions.

"The gasoline will not burn properly unless it is vaporized by the time it reaches the cylinder, because fuel that reaches the cylinder in an unvaporized form smokes, produces soot, and does not burn clean. It wastes energy instead of producing it. The readiness with which gasoline must give up its power is shown by the fact that it reaches the cylinder from the carburetor in less than one fiftieth of a second.

"Thus, as gasoline must be volatile so as to vaporize quickly, so also it must burn rapidly. For maximum power, it must burn in less than one one hundredth of a second. It must not, however, burn instantaneously like dynamite, because then it will cause a knock in your engine like the well known carbon knock. Neither must it ignite from any hot engine parts, valves, and so forth, until the spark comes. If it does, you'll have a case of preignition.

"In addition to being volatile, a gasoline must also be pure, because an impure gasoline will burn unclearly, and may leave sticky substance on the cylinder walls, which will 'glue' read duct and carbon soot into the combustion space."

A Tire Tip for High Altitudes.

A tourist in the West recently raised the interesting question whether in going from the low altitude of the plains to the high altitude of some of the mountain districts he ought to let some air out of his tires because of the difference in air pressure at the higher level.

In replying to the inquiry an expert says:

"We find that there is a difference of air pressure in tires as measured by a standard gauge, depending upon the altitude; the higher the altitude the greater the air pressure. At sea level a tire with a gauge reading 67.5 pounds to the square inch would have, if the fifteen pound pressure of the surrounding air were removed an absolute pressure of 82.5 pounds to the square inch. At an elevation of 7,200 feet, where the atmospheric pressure has fallen to 12 pounds, a gauge pressure of 70.5 pounds would be necessary to raise the absolute pressure to 82.5. Similarly at 20,000 feet—if such a height could ever be reached by a motor car—the atmospheric pressure would be reduced to 7.5 pounds, making a gauge pressure of 75 pounds necessary to bring the absolute pressure up to 82.5 pounds.

"A tire which, according to a standard air gauge, carries 75 pounds at 20,000 feet would, according to the same gauge, register 70½ pounds at 7,200 feet and 67½ pounds at sea level.

"This difference is due to difference in weight of the atmosphere at different altitudes. As indicated the weight or pressure of the atmosphere falls from 15 pounds a square inch at sea level to 12 pounds at 7,200 meet and 7.5 pounds at 20,000 feet.

"Since the change in gauge reading or tire inflation at 7,200 feet, about the highest altitude likely to be reached by an automobile, is only three pounds, it would not be good practice to recommend any change of inflation pressure for tires passing from the lower to the higher level, or vice versa."

Music in the Schools Helps All the Other Studies

Music can be interestingly correlated with almost any branch of study, and still be a recreation and a diversion to the pupils. This was the key to an address on some phases of music in our schools that the writer lately had the pleasure of hearing. "Teachers who neglect to pass lightly over this important point," said the speaker in part, "greatly limit the breadth of culture that would otherwise result. It is a universally recognized fact that the chief asset of a nation is its children, and conditions surrounding their physical and mental growth are matters of the greatest importance. Whatever concerns the children of a community, interests the people.

"There are many instances of parents, almost wholly neglectful of social duties in other lines, who will drive over several miles of bad roads to see their boys and girls take part in some school exhibition. The seating capacity of school auditoriums is always taxed to the limit whenever a declamatory contest, a school concert, or anything of a similar nature, is staged. Pageants designed for school production, commemorative of some historical event, or graphically picturing some national humanitarian problem, afford excellent opportunities for the co-operation of the literary and musical resources, and are valuable educationally to an entire community. The last is especially true where a large percentage of the residents are foreigners. In many instances the school building is the most convenient and suitable place for community gatherings. So it naturally follows that the school be the centre of community interest, and that its leavening influence be widespread.

"The school music of to-day only partly fulfils its mission if it fails to take account of the desires and ambitions of the pupils to become instrumental performers. Even in small schools this branch of music is being carried on in connection with school work with a considerable degree of success.

"The piano seems to attract the greatest number. It is probably the most suitable means by which a child may gain early musical experience, and furnishes excellent preparation for the study of almost any instrument in which he may wish to specialize later. The violin is increasingly popular, and the brass instruments are gaining in favor. Advice as to the choice of an instrument and encouragement to continue in study and practice will make it possible to arrive at that most desirable goal of school enterprise, an orchestra. In itself it is a benefit to both school and community, and many of its members after leaving school will be efficient factors in the musical organizations of their own or other communities whither their interests may lead them."

How Forest Fires Start.

Do your part in preventing fire becoming master. Look after your camp fire. See it is dead out. Do not throw matches or burning material or ashes where they might ignite leaves or twigs or rubbish and thus set fire to the forest.

Foolish Question.

Little Tommy (at the post office)—"Please give me my pa's mail."

Clerk—"Who is it for, sonny?"

Little Tommy—"It says on the letters."

Revisitation.

After long years I visited once more
A village which in childhood I had known
So well that I had loved each stick and stone;
How different now the aspect that it bore—
What I remembered a gigantic store
Was just a tiny shop; the village green
Wasn't the park that in my mind had been;
The hills were far less mighty than of yore.

And, seeing these old dreams of grandeur pass,
Was like the feeling, half amused, half sad,
Which some time almost every one has had,
Of glancing of a sudden in a glass,
To cry in puzzled incredulity:
"Is that strange, shrunken creature really me!"

—Charlotte Becker.

Famous Britishers at Play.

All the world knows of Mr. Lloyd George's love of golf, and that an historic game at Cannes is said to have preceded Cabinet crises in France and Italy; and now we are told that his latest form of recreation is exercise with the punch ball.

Mr. W. E. Gladstone's fondness for tree-felling provided many subjects for caricaturists, and the stories of his prowess with the axe at Hawarden used to astonish a former generation.

The British Cabinet contains some keen devotees of sports and pastimes. Mr. Winston Churchill has shot big game, and is no mean player of polo, while only a few weeks ago he met with an accident while following the hounds. Lord Birkenhead is often to be seen on the tennis court.

Earl Balfour is another distinguished player of lawn tennis, while Earl Grey appreciates the quiet joys of country life, his favorite recreation being fishing.

With great masters of men the exercise of power is at once their work and their recreation.

The late H. B. Irving's hobby was the study of criminology, a subject in which many well-known actors are interested. Some of them make a point of being present at every important trial at the Old Bailey.

Electric Incubator Turns All Eggs at One Time.

The increasing use of electricity in rural districts has led to the development of an electric incubator in which the work of turning the eggs is reduced to a minimum. The incubator is a divided metal cylinder with two woven-wire trays, in which the eggs are carried, supported on a central tube. The cylinder itself is hung by a ball pivoted at the centre of gravity.

Jimmy Knew.

Jimmy, who was inclined to be a braggart, was telling his father and mother of his experiences while out camping.

"And all at once I stepped on a big rattlesnake," he began.

"How did you know it was a rattlesnake, Jimmy?" asked his father, sceptically.

"I could hear its teeth chatterin' the minute it saw me."

Wilhelmina An Expert.

In addition to being an expert linguist, Queen Wilhemnia of the Netherlands is an expert horse-woman, is a fairly accomplished musician and has an intimate knowledge of practical housework.

I Will.

I will start anew this morning with a higher, fairer creed;
I will cease to stand complaining of my ruthless neighbor's greed;
I will cease to sit repining while my duty's call is clear.
I will waste no moment whining and my heart shall know no fear.

I will look sometimes about me for the things that merit praise;
I will search for hidden beauties that elude the grumbler's gaze;
I will try and find contentment in the paths that I must tread,
I will cease to have resentment when another moves ahead.

I will not be swayed by envy when my rival's strength is shown;
I will not deny his merit, but I'll strive to prove my own;
I will try to see the beauty spread before me, rain or shine—
I will cease to preach your duty and be more concerned with mine.

—S. E. Kiser.

Very Sorry.

Little Michael had been on a visit to his grandmother, who had not been very well.

His father had come to fetch him home, and Michael, as he was leaving, felt that he must be polite.

So he looked up at his grandmother and said:

"Good-bye, granny. I am so sorry you have been ill!"

"And I'm sorry, too!" his father put in.

Michael felt that this lessened the merit of his remark. So he continued:

"But my sorry is much bigger than his sorry, granny!"

The Reason.

Tourist—"Why, Donald, you surprise me. You don't like the English people and yet you have an English wife."

Donald (with a laugh)—"Ay, mon, that accounts for it."

The Procession of Bottles.

A singular custom is that observed in Boulbon-en-Provence, a village in the department of the Bouches-du-Rhone, near the town of Aramon, so famous for its red wines.

Every year, on St. Marcellin's Day, that is on the first of June, there is a procession of bottles. About 7 o'clock in the evening, while the bells are ringing at full pitch, the men—the men alone—assemble and in a procession march to a distant chapel, every one carrying a bottle of his best wine.

The cure blesses these bottles after which the participants drink a gulp of this wine while the priest chants psalms.

At the end of the ceremony the cortege returns to the village, this time following the banner of St. Marcellin. And then every one goes home with the precious flask which is only opened in case of fever, stomach trouble or other indispositions.

St. Marcellin, in Bouldon-en-Provence, is as favorable to water as he is to wine. In periods of drought his bust is carried across the vineyards, whereupon the carriers sing, and immediately it rains.

More Than Enough.

When an eminent Englishman, noted for his solemnity of manner as well as for his noted achievements, visited this country, he was on one occasion the guest at diner of a popular club.

A gentleman with a wide reputation as a brilliant talker and speech-maker told an exceedingly funny story, at which the Englishman laughed decorously.

The gentleman told a second story, and again the Briton smiled appreciatively.

Then came a third story, but the Englishman sat unmoved, even gloomy.

"It was a good story," said the Briton's neighbor at table. "Why didn't you laugh?"

"I am fifty years old," said the Englishman, firmly, "and two stories are enough."

CANADA'S FUTURE AS A WHEAT PRODUCER

YIELD INCREASED BY 70 PER CENT. IN DECADE.

Provinces to Become Grainary Not Alone of British Empire, But of Entire World.

Senator Calder, of New York, recently declared his conviction that the United States would soon fall behind Canada in the production of wheat. "The Dominion," he stated, "will develop several times the wheat acreage of the United States." Herbert Hoover, the United States Secretary of Commerce, but a short while previously had been responsible for the statement that the United States would in ten years become a wheat importing nation. In 1921 the United States was the world's first wheat producer, whilst Canada had risen from the third place she held the year before, to that of second among the wheat producing countries of the world.

"The peak of wheat acreage in the United States," Senator Calder said, "was 75,694,000 acres, reached in 1919, an increase of 35 per cent. over the wheat acreage of 1910. Canada, in the same year, had 19,125,969 acres seeded to wheat, an increase of 115 per cent. over the 1910 figure" But this figure was by no means a peak for Canada, but merely a step in a series of gradients. The 1921 acreage was 23,261,224 in Canada, or an increase of more than 21 per cent. over 1919. In addition to this the Prairie Provinces, where the greatest expansion in acreage is taking place, will have, according to the estimate of the Western Agricultural Agent of the Canadian Pacific Railway, an increase of nearly 39 per cent. over last year, not all, but a large section of which, will be devoted to wheat.

The production of wheat in the United States increased from 635,000,000 bushels in 1910 to 833,000,000 bushels in 1920, an increase of approximately 35 per cent. In the same period Canada's wheat production increased from 149,988,000 bushels to 263,189,300 bushels, or an increase of 70 per cent. The value of the wheat crop in the United States during the decade increased by 100 per cent., or from $560,000,000 to $1,197,000,000. In the same time the value of Canada's wheat crop increased by 400 per cent, or from $99,530,000 in 1910 to $427,356,000 in 1920.

Canada's Grain Production Only Beginning.

It must be borne in mind when considering these figures and noting the lengthy lead the United States still has over Canada in wheat production that the former has to all intents and purposes reached its zenith of production—in fact the tendency is for a decline—whilst the Dominion, in view of the minute portion of her area under cultivation, and the wonderful possibilities of development, may be considered as having merely entered the lists. Whilst in the three Prairie Provinces of Manitoba, Saskatchewan and Alberta there are less than 121,000,000 acres under private ownership, much of which is not under cultivation, there are approximately 25,000,000 acres of a surveyed total of 200,000,000 acres available for homestead entry. In addition to these surveyed areas, there are tracts which have been only partly surveyed and which contain more than 250,000,000 acres.

The biggest factor in increasing Canada's wheat acreage in the past, and one whose effect will be felt to an increasing extent in the future, is this very availability of large tracts of land upon which hinges the price of farm wheat lands, and which determines the price at which wheat can be grown. The average price per acre of land devoted to wheat growing in the United States has been returned at $2, whilst the average in Canada of settled wheat land has been unofficially estimated at $43 per acre. That this is not a just estimate for all purposes is evident when it is considered that the average price of settled farm lands in Saskatchewan and Alberta, most of which are wheat lands, is less than $25 per acre, and in addition there are these large tracts which may be acquired for a lesser sum or for the price of filing on them.

The future of Canadian wheat is also presaged by its excellent quality, which is beyond question. This has been attested by ten years of uninterrupted successes in carrying off the wheat championship of the world, to be wrested from Canada last year by the State of Montana, only by means of seed of Canadian origin.

How long will it be before Canada is leading the world in the production of wheat? At the present time she occupies the second place in this regard, and a country of less than nine million people is accounting for approximately one-quarter the wheat yield of the United States, a land of more than one hundred and nine millions. In the last decade Canada's wheat production increased by 70 per cent., and granted the agricultural immigration, which would seem to be promised her with all the attractions she has to offer, and the settlement of a further portion of her vacant acreage, the present decade should see at least a hundred per cent. increase and Canada the granary not alone of the British Empire, but of the entire world.

Prairie Homes and Trees.

In twenty years the Dominion Forestry Branch has distributed sixty million trees to farmers living in the Prairie Provinces. That this has been worth while, and that it has been of great benefit both financially and in the way of added comfort and pleasure is made clear in forty letters written by settlers telling of their success with trees. These forty letters form the principal part of Bulletin No. 72, "Success in Prairie Tree Planting," just published by the Forestry Branch. The writers are most enthusiastic in regard to the value of shelter-belts which have not only greatly increased the cash value of their farms, but also have made their places more homelike and enabled them to grow apples, plums, small fruits and tender vegetables where these were impossible before. The other part of the bulletin explains the co-operative plan under which trees are sent out free to the prairie settlers. Copies of this bulletin may be had free upon application to the Director of Forestry, Ottawa.

Confused.

There is a certain young matron of Philadelphia who is a bit absentminded and, consequently, apt to confuse matters at times. On one occasion she was fearful lest she would forget to order the chickens in time for dinner. Throughout the forenoon she kept repeating to herself, "Chickens—grocer—chickens—grocer."

Finally, when he hour approached at which she was accustomed to call the grocer, she took up the phone and asked:

"Have you any nice young grocers?"

"Why, yes, madam," came in a surprised tone from the other end.

"This is Mrs. Smith talking," she went on, "and I want you to send me a couple dressed."

"Send you a couple dressed?"

"Well—no, you had better send them undressed, and then when my husband comes home he'll wring their necks and the cock can dress them."

Nothing Easier.

Mr. and Mrs. Jimton, a young couple recently maried were beginning their housekeeping and were doing the work of putting the rooms in order themselves.

Mr. Jimton was having some trouble in hanging one of the presents, a fine clock, upon the wall of the dining room.

"Why is it taking you so long, dear," asked the young wife, "to put up that clock?"

"I can't get it plumb," he replied.

"Then why don't you send for the plumber?" she asked in perfect sincerity.

NAMES THAT LIVE

When you get up in the morning and pull on your worsted socks, does it ever occur to you that the word worsted indicates that this material was first made at the town Worstead? You then put on your suit of Cheviots or Tweeds, and slip a Cambric handkerchief into your pocket, thereby calling to mind that this delicate fabric was first woven at the French town of Cambrai.

You come down to breakfast and enjoy a cup of Mocha, and when you get ready to go out afterwards you don your Ulster or Chesterfield if it is a cold day, or in summer put your Panama upon your head.

An amazing number of the articles which we use every day of our lives are named after the towns from which they originally came, though in many cases their manufacture is to-day carried on in places totally different.

Huddersfield, for instance, has replaced Worstead as the centre of the worsted industry, while Panama hats are imported chiefly from Ecuador, in South America, and Mocha coffee (so-called) is grown principally in Java. Better cambric is made to-day in Belfast than ever Cambrai produced.

Among other articles of attire which we call by the names of the towns which they originally came from are the Inverness cape and the Leghorn hat. The cape is still more of a favorite in Scotland than elsewhere; Leghorn hats, with their wide brims, are to this day made from Leghorn straw, though the manufacture goes on in several other places.

Balbriggan, which has given its name to a certain type of cotton hosiery, is a small watering place some twenty miles north-east from Dublin. Melton is another fabric which reminds us of a town, now perhaps better known as a hunting centre than for its manufactures.

It is nearly a century since any pottery has been made at Delft. The name of the ware will always remind its users, however, that it was this little Dutch town which in the sixteenth century began the manufacture of the pretty blue and white pottery copied from Chinese and Japanese designs. Dresden, Worcester, and Sevres are all names better known in connection with beautiful china than with the towns to which they belong.

The connection between damsons and Damascus is almost forgotten. Nevertheless, damson is only a contraction for Damascene plum. Currants are made from a small grape still grown in the neighborhood of Corinth. Their name is a corruption of "Corinthians."

Cherries gain their name from the long extinct city of Cerasus, in Asia Minor, while the quince bears this name because the tree was first brought from Cydonia, in the island of Crete. Chestnuts remind us of another city of past days—Castana, in Pontas—whence the trees first came to Europe.

Cheeses, too, of various sorts render familiar names that would otherwise be forgotten. Stilton is a small town in Huntingdonshire, and Cheddar, famous for its caves, is a Somersetshire village of less than 2,000 people.

"What We Eat To-day, Walks and Talks To-morrow."

In a recent address Miss Helen G. Campbell, Demonstrator for the Dominion Dairy and Cold Storage branch, undertook to explain how the dairy and good citizenship were correlative, and to show how Women's Institute could aid, in making this widely understood. Primarily her argument was that good food made good citizens, and that there were no purer nor better foods than the products of the dairy. The benefits derived in particular from the liberal consumption of milk, especially by children could not be over-estimated. Health officers, without exception, took this view. Tests made with school-children in different cities confirmed its truthfulness. Abundant truth was forthcoming that not only were the children benefited by a plentiful supply of milk physically but also mentally. Children who consume milk regularly and plentifully were stronger and more active and advanced more quickly in their studies than those who either manifested a distaste for milk or were deprived of it in their diet. Miss Campbell quoted experiences at several cities in substantiation of these assertions. It could not be otherwise than that children so nourished should become the best citizens.

Herbert Hoover, the famous food controller and director of relief for the United States in Russia and other famine-stricken countries, had declared that the greatest cruelty to any nation was to deprive it of its dairy cattle. With an abundance of cheap dairy products in this country, there were yet many undernourished children in every province because of the failure of parents or guardians to appreciate the value and importance of milk products to the development of mind and body. Surveys conducted by doctors, nurses, and other welfare workers had established this fact, and had also revealed that undernourished children from this cause were to be found among the well-to-do classes as well as among the poorer. Such children are frequently to be found in the farm home. As well as the improvement of health generally, consumption of milk leads to the formation and retention of good teeth.

It is the duty of every good citizen to keep fit, and the generous use of dairy foods will assist in maintaining health and efficiency. The man who wrote "What we eat to-day walks and talks to-morrow" was stating a profound truth.

A Peculiar Epitaph.

The English language is peculiar and has many twists. Here is an epitaph written by a loving wife:

Here lies my Husband
In his last, long sleep;
Tears will not wake him,
Therefore I weep

Where Possession Becomes a Crime

By E. Van Lier Ribbink

Suppose you were taking a walk over the Kimberley diamond fields, in South Africa. And suppose you came across a big, fine, pure-water diamond lying somewhere on the surface. Wouldn't it be your natural inclination to pick up the gem, hold it to the sunlight and give a wild whoop of delight? And wouldn't you, furthermore, tell all your friends of your good luck, and then hop aboard a train to Cape Town, take the next steamer to Amsterdam and there have your diamond cut. And then you would sell the gem say, for $50,000 or so, and live happily for the rest of your days. Would you not do all of these things?

You would not!

If you did, this is what would happen to you: You would be arrested by the South African constabulary as soon as they got wind of the fact that you possessed an uncut diamond. Then a special law known as the I. D. B. Act would be invoked, and you would spend the next few years in jail—a nice hot jail, with a torrid sun beating down on the sheets of corrugated iron which form the roofs of these places of involuntary retirement.

And your valuable diamond would be confiscated by the State and turned over to the two great diamond syndicates that control all South African diamond deposits.

The letters "I. D. B." abbreviate the law known as an "Act Regulating (I) llicit (D) iamond (B) uying," which is enforced throughout South Africa, and for the violation of which many "gentlemen of fortune" are now languishing in the Pretoria state prison in the famous old Johannesburg "Fort" and in the plain Kimberley jail.

Now, on the face of it, the I. D. B. law seems unjust, since it creates a monopoly of the glittering gems with which nature seems to have endowed South Africa to the exclusion of the rest of the world. But, like many things that seem unfair, there is yet a good deal to be said for the law as it stands.

It is a favorite legend throughout the fields that the present value of diamonds is maintained artificially and that, if the enormous quantity of fine diamonds stored away in the vaults of Kimberley and Premier mine should be suddenly thrown on the world's markess, diamonds would drop in value and would not be worth more than other stones, such as aquamarines, opals and sapphires. I was once allowed a peek at the stored-up treasure of the Premier mine and the sight certainly did beggar description.

The I. D. B. Law.

It is to prevent thefts from the mines that the sweeping I. D. B. law presupposes that any man found possessing a rough, uncut stone is a criminal.

The law ordains that any man finding such a stone shall turn it into the nearest police station or Magistrate, with an explicit statement as to just where he found it. And, in finding it he has located an entirely new field, the diamond belongs to the owner of the land on which it was picked up. Such eventuality is, however, unlikely, for diamonds are found on the properties controlled by the de Beers Syndicate only, and whenever new diamond "pipes" have been discovered this syndicate has been able to buy out the owners of the land.

Yet diamonds are stolen in great quantities from the fields and a lively traffic in the uncut gems is carried on by adventurous spirits who seek to become rich quickly. The "peddlars" try to get into touch with the natives working in the diamond mines and it is wonderful what desperate chances both buyers and sellers will take.

The native workers in the mines belong to the various South African tribes, among whom are Zulus, Shangaans, Bastutos and other Bantus. When these "boys" sign up for the diamond mines, they say good-by to the outside world for six months at a stretch, and are not allowed to live outside the mine "compound" for the entire contract period. And when they at last do leave the fields to return to their "kraals" they are subject to a rigorous search of their persons and their belongings before they are suffered to depart.

But the wily native frequently knows how to smuggle valuable diamonds out of the compounds and his ways are fearful and wonderful. There are records where natives opened the skin under their armpits and secreted diamonds in the painful incisions.

Another was noticed to limp badly as he left the compound. A good-natured white doctor decided to help the "boy" and ordered him to show his foot. Sure enough, under the native's instep the doctor noticed a festering wound.

The native said "it was nothing," but the doctor insisted on lancing the wound and treating it with disinfectants before the black man returned to Zululand. And as the doctor inserted his hary knife in the wound it encountered a hard substance which broke the instrument and turned out to be a very fine diamond of considerable size, valued at 10,000 pounds sterling, or $50,000.

Needless to say, this Zulu went back to Zululand without his diamond, nor was he able to keep his tryst with the white "pedlers" who were to meet him outside the mining compound.

New Use for Glass Eye.

Another native worker, an intelligent-looking Basuto, who had attended a mission school, used to sign up frequently for work in the diamond mines. At last suspicion was directed to him on account of the fact that he seemed to be extremely wealthy for a native. Again and again he was searched, but nary a diamond was found.

Then one police officer, more diligent than his colleagues, shadowed the man for three or four days after he left the fields. He followed him into a bar and there saw him take an artificial eye from his head and extract from it a fine diamond, which he handed over to a smuggler, who paid him on the spot.

The officer arrested both the native and the white trafficker, but was nearly murdered before he got out of the place. Though the native had been examined time and again, no one had ever noticed that he was afflicted with a glass eye, which he had been provided with by the kindly missionaries.

There was also the case of an East Coast native who kept a fine pigeon. One day he was observed as he took the pigeon out into the compound yard, and get ready to give the bird its freedom. But somehow things went wrong; the pigeon circled repeatedly over the compound, and one of the white guards, who had read of carrier pigeons, let fly at it and brought it down.

A fine pure-water diamond was found attached to its leg and though the white smugglers outside the compound kept watch over the heavens for several days, the diamond-loaded pigeon did not put in an appearance, and several "gentlemen of fortune" were unable to "turn an honest penny" as they had hoped to.

It will, therefore, be seen that the authorities have no easy task in coping with thefts from the diamond mines. The I. D. B. law offers the best and only chance of suppressing the traffic, since it allows no private individual to handle uncut stones and also requires the registration of every diamond found in South Africa.

Still more elaborate precautions are taken against thefts whenever a particularly valuable diamond is discovered in South Africa. When the Cullinan diamond, as big as a man's fist, was found in the Premier mine, it was exhibited in Pretoria under heavy guard. And when the gem was sent to Amsterdam, Holland, to be cut by the firm of Asscher & Sons, the world's most famous diamond cutters, an inspired story was printed in the South African and European newspapers, telling how the diamond had been placed aboard of a certain mail steamer, in the captain's cabin, where it was guarded day and night by armed men."

Famous Cullinan Diamond.

What really happened was that the gem was packed securely in an ordinary wooden box for mailing, that it was registered, and sent through the regular South African mails, thus hoodwinking those who might have ulterior designs.

On the arrival in Amsterdam, the great diamond was given into the care of the most famous cutter in Asscher's factory. This man was isolated for an entire week in a windowless room in order that he might safely make a study of the stone without interruption. He employed his time to good advantage and in the presence of the head of his firm he separated the great gem into three parts with two sudden blows. This immense stone was bought by the South African Government from the Premier mine for about $2,000,000, and was presented in three parts to King George V. on the occasion of his coronation.

One part is pear-shaped, and the two others are brilliants. They are set in the royal crown of England, but can be removed. The pear-shaped stone is worn as a pendent by the Queen on occasions of State.

This is the greatest diamond ever found, and eclipses by far the Koh-i-Noor, the Hope diamond and other famous stones. It was named after Thomas Cullinan, manager of the Premier mine, but was found by a native workman only six feet under ground. When discovered it was thought to be a lump of rock salt or crystal. The native who found it was rewarded with a present of sixteen oxen, eight of which he immediately disposed of in buying himself a wife, according to Kaffir custom.

Of course this native never had a chance at I. D. B. with such a huge diamond, for its size alone would have prevented it being hid on his person!

But, in the old days, before the I. D. B. law was promulgated, many a fortune was made through the buying of smuggled diamonds. In most cases the ignorant natives who stole the diamonds received but a fraction of their value, and diamonds were often bought for the price of a drink, or for a pound of extra strong, black Boer tobacco, such as your Kaffir likes to smoke all day from ill-smelling native pipes, manufactured out of Karroo desert roots.

Romance of Discovery.

Some of the greatest South African fortunes of to-day are known to have been founded originally through I. D. B. The fortune of one South African Senator and multi-millionaire is always referred to as the "I. D. B. millions." Several of these millionaires began their careers as peddlars of shoestrings, cheap finery, etc. Their trade brought them into contact with the native workers in the mines and thus a lively and organized traffic in stolen diamonds soon sprang up in and around Kimberley.

Diamonds were first discovered near Du Toit's Pan, Kimberley. The story goes that a peddler, who afterward founded a fortune through I. D. B., had been ill on the farm of a well-to-do Boer. One day, when recovering, the peddler sat outside the farm house and noticed a glitter on the stable wall opposite.

He strolled over and with his knife extracted a stone from the mud plastered on the wall. Returning to Cape Town, he found this stone to be a diamond and sold it. He returned to the farm, found where his Boer host had obtained the "mud" on his farm, and promptly bought the property. Shortly afterward the main diamond deposits were found in "blue earth pipes" on the neighboring farm of Jacobus de Boer.