THE QUESTIN' O' CLEENA.

How the Beautiful Cleena Sought Her Lost Father, Feargus the Black, Him That the Little People Had Cast a Spell Over, as Related by the Old Gardener.

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"A truce to fightin', now. Not one word comes out o' me mouth until ye're whist as lambs hearkenin' for the grass to grow. Ay, see now, how aisy it comes!"

Men were strong men in those days, but niver one at the court o' King Murdough had come nigh matchin' Feargus the Black, until the sons o' Cormac set foot there. Many a time he thought how 'twas the green jerkin an' the power o' the Little People backin' that same that had lost him the fight; though he'd wit enough to hold his tongue, an' not risk the angerin' o' King Murdough. But 'twas ever in his mind that some day he'd prove himself as good a man as Conan o' the Long Arms.

Now, there came a day when King Murdough had a message in hand for Torcall the Dane, that dwelt nigh the shores o' Moyle. An' 'twas a sharp word was to be sent, an' full o' danger to him who carried it.

The King sat on his high seat, when all was ready, an' looked around the hall, where stood many to do his biddin'. An' in a far corner, by the great fireplace, Feargus the Black was talkin' with Cleena, his daughter.

Then said King Murdough, in a quiet, small voice, as he'd been talkin' to himself:

"Is there a man can carry my word to Torcall the Dane, an' bring me his thrue answer without failin'?"

Half o' those in the hall paid no heed at all, but Cleena caught the hand o' Feargus.

"'Tis your chance," she whispered. "Go you an' claim the right."

So like a flash Feargus pushed through the crowd an' knelt to King Murdough, though many were drawin' back. Torcall was no child to be reckoned with.

"What would ye have?" asked the King.

"Leave to carry the word to the shores o' Moyle," answered Feargus.

Murdough shook his head, for 'twas not in his heart to lose a good fightin' man like Feargus to the Danes, when a lesser would do as well.

"Such work is not for you," he said. "Wait, for the time o' fightin' will come afther."

"Give me leave to go, King Murdough," said Feargus again.

"Nay," said Murdough, "for it may be that you'll not return."

Then Conan spoke, that had been sittin' by the King.

"'Tis right he has. Give him leave for seven days an' seven more, to go an' come in, an' if he comes again in safety, at my side shall he fight the men o' Torcall."

Feargus looked at Conan, that was wed to Princess Maurya, an' for the first time a dash o' friendship was in the meetin' o' their eyes.

"Come back will I, Conan o' the Kingdom. In seven days an' seven more I'll claim that word from ye."

With that Conan loosed the huntin' horn from his belt, an give it to Feargus.

"'Tis a token o' the word I give," said he. "Return it in the time, an' lead the fightin' with me. An' carryin' it, ye'll be safe from the Little People, but use it only at your sorest need."

So before night fell, Feargus the Black, was ridin' away to the sea, an' none with him, but Kevin, the groom. An' Cleena stood on the castle wall, with her black hair hangin' round her, an' watched him go.

Each day, when it neared sunset, she went up in the tower, lookin' for him; an' it came to be seven days an' three more—then seven days an' four more, an' no word o' Feargus.

Now the next day to that was a great huntin', an' Conan an' Princess Maurya rode out at the head o' the court, all dressed in gay colors. But Cleena watched from the tower, an' King Murdough slept.

When the sun was turnin' to the west, an' all noise o' the huntin' was far an' away she saw a man runnin' along the path by the river. An' as he neared the ford, she saw it was Kevin, the groom. Like a hawk from the clouds she was at the gate, before any other could reach it.

"Where left you Feargus?" she cried, an' Kevin, the groom, crouched down on the stones, fearin' the great dark eyes o' her that were lookin' through an' through him, an' callin' him coward for leavin' Feargus.

"'Tis not for me to say," he whispered. "When we were passin' the head o' the Valley o' the Dark Lough, he dropped the horn o' Conan, an' goin' back to search for it, for 'twas his token, I lost sight o' him, an' could find naught o' him, though I called many a time."

"An' the horses?" asked Cleena.

"When I came back to where I had tied them, they were gone, an' no trace to be seen. 'Tis the Little People have stolen them all away. Ay, that it is."

Then Cleena turned to those in the courtyard, an' there were not many, for all the fightin' men were off at the huntin', an' says she:

"Who dares go back to the valley o' the Dark Lough to find Feargus?"

But none answered. An' as for Kevin, the groom, he slipped away, for fear o' bein' made to show the way.

"Is there not one man among ye to be friend to Feargus?" asked Cleena, lookin' from one to the other, an' waitin' for who should step forward. But a hard man an' a proud was Feargus, an' in his need, none dared brave the Little People to aid him.

Then came scorn to the eyes of Cleena, an' she turned an' passed them—holdin' her cloak that it might not touch them.

"All this shall King Murdough hear when he wakes," said she, "an' Princess Maurya when she comes from the huntin', an' Conan o' the Kingdom shall reckon with ye. But for me, I go alone to seek Feargus the Black, where ye dare not follow."

With that she went into the stable, an' there lay Cian, the waitin' boy, sound asleep. As she brushed by he woke an' sprang up.

"What would Lady Cleena?" asked he.

"A horse, that I may ride to search for Feargus, who is lost by the Dark Lough."

"Is there no man to go?" asked Cian.

"Nay, none but children, tremblin' for fear o' the Little People."

"Then will I ride with you. Though I have but a boy's strength for fightin', yet was my mother a wise woman, an' taught me many a runnin' charm."

So Cian brought out two horses, an' together they rode out o' the gate an' across the ford. Cleena never lookin' back to the castle. All through the night they rode, [illegible]

[illegible]

courage o' ten came into her heart. Down the valley she passed, lookin' every way for a sight o' Feargus, an' callin' his name now an' again, but none answered.

'Twas mortal dark down at the water side, an' what way to turn was more nor she knew.

"'Tis sore needin' help I am," said she; and with that she blew a soft note on the horn.

It echoed all down the lough, like the tremblin' of a bell, an' before it had fair died away she saw on the sand a little boat o' skins, with a paddle swingin' in the water. Cleena niver waited for thinkin', but stepped in an' paddled toward the island.

There was no sign o' life on it, but she tied the boat to a bush that hung low with that same knot o' Cian's. Then from the fold o' her girdle she took flint an' steel an' made a bit of fire to light a dry branch that lay handy. With that torch she went on, an' soon found the island cut in two by a narrow ditch o' water. Howsomever, she leaped over it an' again called Feargus.

There was a rustle in the leaves, an' a voice answered, "Cleena! Daughter!"

"Father! Come!" she cried again.

An' out o' the dusk came a tall man, an' the light from the torch fell on the face o' Feargus. She was just going to run to him, when she sudden thought what Cian had said—an' she slipped back past the ditch, holdin' the torch to light him. He came to the edge, reachin' out his hand.

"Help me to cross. 'Tis mortal weary I am," said he.

"Nay," said Cleena, "come you over," but with that word he was naught but driven mist.

"'Twas his shadow," thought Cleena; an' turnin', she went the other way, still callin' on Feargus. By an' beyant she heard a branch break, an' again a dark figure answered her; an' 'twas the likeness o' Feargus.

Now, here was no water to cross, so quick, to try was it a thrue man, she held down her torch an' set fire to some dry leaves.

"Come to me by that," said she.

"Give me your hand, first," said the other, movin' near.

"Nay," said Cleena; an' 'twas as if a smoke blew away, an' left no man behind. Just then she heard a sound at her feet; an' there, lyin' in the grass, was Feargus again, bound hand an' foot.

"Loose me, if it be Cleena," he groaned.

"Wait," said Cleena, runnin' back to the lough's edge, an' dippin' the scarf from her neck in the water.

'Twas with fire and water she returned to Feargus, an' with the burnin' end o' her stick she parted the cords that bound him. Seein' that he never flinched at the fire, she quenched the sparks on his coat with the wet scarf. Still Feargus was before her, an' she began to believe it himself.

"Rise an' follow," she said; an' he obeyed, seemin' half sleepin'.

She led the way to the boat, not lookin' back until she was in it; an' then, when she turned, in the gloom stood three Farguses, each bendin' forward to enter the boat, an' naught to show which was her father. A sore tremblin' came over her, an' then she raised the horn an' blew a blast.

Smoke cleared away overhead, an' mist drifted across the water, but the thrue Feargus stepped into the end o' the boat, an' sat quiet while she paddled back to the shore. Sort o' dazed he was still, as he followed her up the glen to where Cian was waitin' with the horses, but not until he was fair in the moonlight outside did he come to his right senses.

"'Tis you, Cleena!" says he.

"Ay," says she, holdin' the horn to him. An' at the blast he blew, out o' the forest came the horses that had been lost by Kevin.

"Lose no time," called Cian. "'Tis night on mornin', an' this seven days afther the seventh."

"Then haste's our word," says Feargus, an' quick into the saddle, an' swift they rode across the hills to the road up the river.

'Twas a long, weary ride before them, but on they pushed, waitin' for neither rest nor sleep; an' as the sun neared the trees to the west, they rode to the ford; an' there stood Conon o' the Kingdom, with Princess Maurya by him.

Feargus sprang down an' held out the horn.

"Torcall refuses tribute, Prince Conan; but 'tis as your friend I'll fight at your side in the battle when we overcome him. For if the Little People helped you at your need—sure 'tis meself would never be here but for the aidin' of a slip of a girl an' a bit of a lad."

So they clasped hands like sthrong men; an' from the men o' King Murdough came a great shout, an' into the castle they went with high honor.

"But Kevin, the groom?"

"Sure, he slipped out o' the tale entirely, for very shame, an' that's why I never knew what befel him."

TELEPHONES AT $1 A MONTH.

Spread of Independent Companies Doing Local Business in Kansas.

TOPEKA, Kan., Dec. 28.—The rapid growth of the independent telephone movement in the Western States in the last three years has been a surprise to those familiar with the old conditions.

The telephone plants of Kansas and Missouri were practically limited, prior to 1897, to those operated by the Bell company and its allied organizations. The larger towns alone had systems, and these, owing to the rates and the general stagnation of business, were poorly patronized.

It was not uncommon to find towns of 3,500 or 4,000 people with from only forty-five to sixty subscribers. The lowest rates in towns of that size were $3 a month for business houses and $2.50 for residences. This was to many prohibitive.

Then there began an era of local telephone systems. The commonest form was for enterprising young men to organize a company in their home town and secure subscribers by personal solicitation. They rented telephones at from $1 to $1.25 a month and were successful.

The return of prosperous times assisted them greatly. The growth has been such that there are now in this State alone 150 central stations with from one to four operators each.

The towns that formerly had fifty subscribers to the old system now have from 250 to 400 to the new. By the extension of the lines among the residence districts the telephone has become a necessity to business houses and those who are in touch with the life of the towns.

Along with the systems in the towns has gone on the long distance toll line building until there are 750 toll stations connected with the independent telephone systems in the larger places. [illegible]

[illegible]

ADVENTURES OF THE TINY GIANT

Copyright, 1901, by C. B. Loomis.

Gilbert Harding was going down to the swimming hole when the wizard came along.

Gilbert Harding lived in Hardingville, and the wizard nobody knew where, but Gilbert knew he was a wizard as soon as he saw him.

"Are you Gilbert Harding?" asked the wizard.

"Yes, sir," said Gilbert, digging in the road with his bare toes.

"Going swimming?"

"Go'n' ter try to," said the boy. "Hardly any water there, so long since we had rain."

"Do you always keep your promises?"

"Yes, sir," answered the boy.

"Well, I have in my pocket a giant who used to be 40 feet high and who had a voice like a half dozen thunderstorms and who could crush an oak tree to powder with his left hand. He was very wicked, and I tried to destroy him, because he was laying waste the country next to my native land, but all I could do was to make him tiny."

"Let's see him," said Gilbert, all thought of the swimming hole vanishing.

The wizard put his hand into his pocket and drew out a muscular little giant about four inches high. He set him on the top of the stone wall, and the giant rolled his dark eyes under his shaggy little eyebrows and growled out in a voice that had a thunderlike quality, although it was no louder than the voice of a locust:

"What did you do that for? The sun hurts my eyes."

Gilbert was delighted with him. He could see that he was built for a giant in spite of his smallness. His arms were very thick for their length and his fingers looked as if they could crush a lead pencil to powder even then.

"Every day at noon I give this fellow a powder that keeps him small. Now I have so many things to attend to that I don't care to bother with his powders so I've been on the lookout for a boy to take care of him and I know you are the one, for you don't forget to do things. Remember that if you neglect his powder at any time he will be restored to his old size at once and then it will go hard with the good people of Connecticut."

"I'll give him a powder every day if I can have him to play with," said Gilbert. "And you can depend on me not to forget."

Then the wizard handed a tin box to Gilbert, in which were thirty powders.

"If he takes one of these every day for a month he will always be small. Now good-by and be careful. I'll be back in thirty days. Go on down to your swimming hole and you'll find enough water there, I guess."

The wizard vanished and Gilbert went over to the giant and said pleasantly:

"We'll have great times together if you'll take your powder every day without any fuss."

"I dare say," said the giant, with a scowl. "But do you suppose that any great times I may have with you will equal the great times I had when I was a big giant and could level a forest with a puff of my breath? I want to be big again. If you'll forget to give me those powders I'll give you a wheel and an airgun and a camera."

"And have me break my promise to the wizard? No, sir," said Gilbert. "I'll treat you well, but you'll have to take your medicine, because Dr. Wizard has ordered it. Come, let's go to the swimmin' hole."

Gilbert held out his palm, and the giant ran nimbly up his arm to his shoulder, and then he grabbed the lobe of Gilbert's ear, crossed his legs carelessly and began to whistle. It sounded like the roaring of a baby storm, and it made Gilbert shiver. He could easily imagine what that whistle would be if the giant were to regain his size.

Gilbert found three of the boys at the swimming hole, and they were all standing on the bank looking at the water.

"Hello, Gil," said Tom Powell. "Jack dived just now, and he couldn't touch bottom."

But Gilbert was too much occupied with the giant to notice the remark. He held his new companion out at arm's length between thumb and forefinger, and the giant sneezed.

The boys yelled. "Where'd you get it?" "What is it?" "What runs it?" And when the giant yawned and showed a mouth full of tiny but very sharp and strong teeth, they all stepped back in alarm.

Gilbert told them what had happened and wound up by saying, "And I guess the wizard has made this water deeper. Any of you fellows tried it?"

"Didn't I tell you Jack couldn't touch bottom?"

"Well, I'm go'n' to try to."

Gilbert undressed in a twinkling, and standing upon a rock, he dived. It was a risky thing to do as he had no idea where the bottom was and he might have cracked his skull, but the wizard had sunk the bed of the pool at least forty feet and Gilbert took the deepest dive he had ever accomplished.

He came out spluttering, and then the giant who had been left on the bank said he was going to show them how to swim. He took off his clothes, and when he was stripped the boys admired his great little muscles.

Small as he was he had every appearance of a giant, and when he trod water with three-quarters of his length in the air the boys were loud in their praises. He lay on his back and swam by merely winking his little eyelids and if you don't believe that's a hard thing to do just try it the next time you go aswimming.

He hopped over the water on the palms of his hands, he swam with his head under water and his feet in the air and he finished by taking a mouthful of water and blowing it in a tiny stream thirty feet in the air.

When he had stepped on shore he said: "If you have any big lakes around here and will let me grow big again I'll show you some tricks that really are tricks. I can drain a lake dry and then spout it all in the air and flood a whole country."

The boys, being farmers' sons, calculated that that would be almost too much of a good thing as it would ruin the crops.

While they were talking a factory whistle at Terryville began blowing, and Gilbert opened the box of powders to give one to the giant. They were all dated and he drew out the first one, which bore the current date upon it.

Just as he was going to give it to the giant, Jack Sherman, one of the boys, reached for it and made Gilbert spill every particle in the water.

The next minute the giant began to grow at the rate of a foot a second, and [illegible]

[illegible]

After he had swam about a few times he began to splash the water about with his huge hands, and it fell over a large area just like rain.

"Scatter the water over the farms or I'll give you that powder at once," said Gilbert.

The boy looked him in the eye while he was talking, and the foolish giant felt forced to obey him, not knowing his own power. He dashed the water over the drying farms in the neighborhood, nor did he stop until he had used up all the water in the lake, which, by the way, was a mile long and half a mile wide.

By the time he had baled the pond dry the farms for a mile on either side were so thoroughly drenched with water that the crops were saved.

Then the giant lay down on his back to take a nap, for his exertions had made him sleepy, and while he snored with open mouth, Gilbert crept up and dropped a powder on his tongue.

In the wink of an eye he dwindled to the size he had been when Gilbert had first seen him, and the boy knew that he need fear nothing for the present. He picked him up, still sleeping, and snoring in a voice as loud as a cricket's, and ran home with him, and of his further adventures you must wait to hear until Gilbert has finished his supper; or say next Sunday morning.

TO HELP ALONG CONVERTS.

Fund Being Raised to Aid Ministers Who Enter the Catholic Church.

The Converts' League, a Roman Catholic organization which was started shortly after the Rev. Dr. De Costa left the Episcopal Church, is making vigorous efforts to raise a large fund for the purpose of aiding pecuniarily those whose conversion has caused them to lose the means of gaining a livelihood. This, of course, has reference especially to ministers of other churches, who, by embracing Catholicism suddenly lose the only occupation in which they are fitted to earn sufficient money for their support.

As most ministers are married the priesthood is closed to them and the problem of how to support their families in anything like the comfort to which they have been accustomed is not always of easy solution. Many of them take to the lecture platform and some, like Dr. De Costa, Henry Austin Adams and Jesse Albert Locke, formerly clergymen of the Episcopal Church, do very well in that field or in the field of literature.

Those priests of the Catholic Church who give special attention to proselyting say that many a minister is deterred from changing his faith by the fear that he will not be able to provide for his family when he gives up the pulpit. It is to overcome this obstacle that the Converts' League has undertaken to raise a fund sufficiently large to provide for all who wish to enter the Catholic Church. Such a fund has long been established in England.

Two recent conversions which are said to have caused something of a stir in the Eastern States were those of Irving J. Keyes of Milford, Conn., son of the Rev. J. J. Keyes, formerly a prominent Protestant minister of Brooklyn and Buffalo, and his little daughter, Mary. Writing on this subject a short time ago, Mr. Keyes said:

"I feel sure that my many friends who have from time to time left the Episcopal faith for the true Church of Christ will be pleased to know over my own signature that as a result of my studies, as well as of the increasing doubts of the validity of Anglican orders which have taken possession of me in late years, I have and do hereby formally renounce my belief in and membership with the sect known as the Protestant Episcopal Church, and have placed myself under the instructions of two learned and reverend priests of the Connecticut apostolate, Fathers McClean and Hart, in order to properly fit myself for entrance into the one true fold of our blessed Lord and Saviour, the Catholic Church.

"My father, the Rev. J. J. Keyes, formerly a well-known clergyman of Buffalo and Brooklyn, once told me years ago that he would rather see me a good Catholic than a lukewarm, indifferent Protestant so that I feel that, after all, I am still in line with parental advice.

"Certain it is that after facing all the varied consequences of this action on my part I have decided that henceforth and so long as life shall last I will be found doing my duty in the ranks of Catholic laymen, as God shows that duty to me; and I have felt a peace and an assurance of divine approbation of my course that I have never felt before. My gratitude has been enhanced by the fact that my little daughter, Mary, will accompany me into the Church with the full consent of her Episcopalian mother."

Two other conversions that are causing widespread comment are those of the Rev. Alvah W. Doran, who was for some time an assistant in St. Clement's Protestant Episcopal Church in Philadelphia, and James Hazen Hardy, a student in the medical department of the University of Pennsylvania, who was once an acolyte in the same church. Both were confirmed a few days ago by Archbishop Ryan of Philadelphia.

WHO OWNS THE PUPPIES?

Rights of the Owner of Sire and the Owner of Dam Adjudicated.

From the Baltimore Sun.

A sigh of relief came from the crowd present in the office of Albert S. J. Owens in the Law Building yesterday. Mr. Owens, the referee in the Tompkins vs. Byrd dog trial case, announced that he was ready to render his decision. The case resulted from a dispute as to the distribution of seven Irish setter puppies, Dr. John A. Tompkins, Jr., owning the mother and George W. Byrd the father of the pups. As they could not agree as to how many puppies each was entitled to the matter was referred to a Justice of the Peace. Before he could decide it it was agreed between the owners of the parent dogs and the attorneys engaged in the case to submit the question to a referee, and Albert S. J. Owens was selected to act in that capacity, his decision to be final. His decision is as follows:

"My decision is that the plaintiff (Byrd) is entitled to the five dogs in controversy, all cost to be paid to Dr. Tompkins, but exercising the special powers conferred upon me [illegible]

[illegible]

CHANCES FOR THE INVENTOR.

FAME AND WEALTH AWAITING HIM IN MANY FIELDS.

An Electric Storage Battery Needed—Electric Lighting Problems—More Everyday Comforts in Prospect—Better Fuel Wanted—Also a Smoke Consumer.

A few months ago a corporation paid to Prof. M. I. Pupin of Columbia University a fortune for his invention of ocean telephony. This transaction typifies the new conditions in the world of invention.

Many of the ablest inventors of past years have enriched other men, but have amassed for themselves little except fame—and that mostly posthumous. Henceforth the inventor's profit will be great and sure, and not he but the capitalist will assume the chances of failure.

It is significant that the greatest optimists as to the future of inventions are to be found among the men who have the best opportunities of judging the future along this line—the officials of the United States Patent Office. In discussing the subject the other day Frederick Allen, United States Commissioner of Patents, said:

"I certainly do not agree with those persons who consider that we are approaching the end of invention. I believe that the whole creative realm will go on developing and expanding in proportion to the growth of the nation.

"The business of this office shows it. During the past quarter of a century there have been issued in this country more than half a million of patents or over three times as many as had been issued in the three-quarters of a century preceding it.

"It is difficult to predict along what lines inventive genius will be most active. Certain it is that the evolution of new things will go on in constantly increasing proportions."

The imaginative mind naturally foresees the greatest possibilities in the fields of electricity, aërial navigation and the harnessing of the great power forces in nature. It is interesting to note that this view has the support of Charles H. Duell, lately Commissioner of Patents. In discussing the matter, Mr. Duell said:

"In my opinion all previous advances in the various lines of invention will appear totally insignificant when compared with those which the present century will witness. I almost wish that I might live my life over again to see the new wonders which are at the threshold.

"It will be but a few years until the residents of all our larger cities will be consulting the time tables of aërial bee lines to New York, allured by such advantages as 'no smoke, no dust, no heat;' each private residence will be provided with its own cooling room and cooling devices for houses will make bearable any climate under the Stars and Stripes; the sun and the wind will be completely harnessed, and possibly the waves as well; automobiles will be in universal use and quadruplex apparatus should bring the telephone service down to about 10 cents a month."

Probably the field which will give forth the most wonderful inventions in the next quarter of a century is that of electrical science. Within the past few months devices have been patented which will enable Americans to talk with their cousins across the sea; which permit telephone messages and signals of various kinds to be transmitted through the earth or below or above the surface of the ocean without wires; which cause telephone messages to be recorded automatically and repeated mechanically hundreds of times; which make it possible to transmit colored pictures by wire between distant points and enable the despatch of sixteen telegraph messages over a single wire.

The future of electricity and of the whole transportation world waits upon the discovery of some means to harness the magic current and house it in light and compact form. For nearly a third of a century inventors have been seeking to devise a storage battery that will answer all requirements and the inventor who first produces it will obtain wealth and fame.

A cheap, compact and durable storage battery will make possible electric airships, steamless locomotives and horseless carriages of a character more nearly perfect than has heretofore been dreamed of. Automobiles, the popular vehicle of the dawning century, have within a few months declined in price owing to the improvement of equipments, but the discovery of the sorely needed storage battery would eventually make them within reach of all.

The discovery of a practical storage battery will open a new era for the electric railway and hasten the day of electric propulsion for long distance express trains for mail and passengers.

Even the subject of electric lighting has not been exhausted by any means. Greater brilliancy and the saving of the electrical energy now wasted in lighting systems are the goals to be reached, and a beginning has been made by the recent introduction of a modification of the old kaolin light, whereby the mixture of oxides as a light-emitting element has served to produce a glow which is more brilliant than an incandescent light and yet not so dazzling as an arc.

Supplementary to electrical inventions proper will be the discoveries which may be expected in the field of electro-chemistry, the new science. Already this new sphere has pointed a way to filch gold from ores which no other process could induce to release it and the newcomer among the sciences has limitless possibilities for usefulness in the purification of water.

For photography and printing, the great twin educational factors, it is not difficult to foresee marvelous achievement. Color photography and motion pictures have only just begun to unfold their possibilities.

Printing without ink is an accomplished fact, and it is only reasonable to expect the substitution for the tri-color printing process of to-day the multi-color printing process of to-morrow—in other words whereas the best printing presses yet invented have ability to print in three distinct colors at one impression, the presses of the future will transfer to paper imprints embodying perhaps a dozen different colors.

Every citizen is bound to benefit by the boons to be brought by the area of invention embraced in the next quarter of a century, for the reason that many of the luxuries of the present day will be brought within the reach of a vast proportion of the population. [illegible]

[illegible] presently to attract the inventive genius into this field which has proved so productive in the past.

That a demand of this class exists is evidenced by the constant cry of many interests for a non-refillable bottle. Wine manufacturers, distillers, manufacturers of medicine and perfumery have all suffered for the lack of some receptacle which when once its contents have been poured out could not be refilled with an inferior article and sold as the original.

The inventor who can produce a practicable non-refillable bottle that can be manufactured at a reasonable price can set himself down as a millionaire the moment he gets a patent.

For years various inventors have been attempting to secure a substitute for the razor. Recently a Frenchman thought he had solved the problem, but after his device and electro-chemical combination had been in use in the Parisian barber shop a few days the customers discovered that the instrument burned and blackened their chins, and the inventor was obliged to flee before their rage. Nevertheless there is a fortune for him who can discover a harmless substitute for shaving.

It is incumbent upon the race to turn out a genius who shall discover or invent a new and practical fuel. There is a chance that some White Knight of the coming years may contrive to store and distribute the heat contributed gratis by the solar furnace that keeps us all alive, so as to obviate the necessity of lesser fires. Many are at work at this; others are experimenting along the line of fuels.

The one that attains definite results first will be able to warm his hands at a golden grate filled with the form of carbon which we call diamonds, if his taste in extravagance runs to that sort of thing.

Right here comes the need of a perfect smoke consumer, a stove in which soft coal may be burned without the attending evils until the new fuel—which, of course, will have to be cheaper—is produced or until solar heat storage may be practicable.

PUMPMEN AND LINEMEN.

Important Workmen in the Great Coal Oil Industry.

From the Philadelphia North American.

A class of men who know the real meaning of the term "strenuous life" are the hardy pump linemen, who superintend the transit of oil from well to tide water. They live thousands of feet above the level of the sea on lonely mountains. Months pass and they never see a new face. Clouds, mists and fog, above, below and around them, form the eternal landscape. In the summer season, the work, though hard, can be endured; its main discomforts are the isolation and the physical exhaustion. But when winter chains the mountains in its icy spell then the lineman is subjected to hardships from which even the strongest man might well shrink.

Even though the mercury coquette with the zero, the pipes must be kept in condition to carry the oil. To make necessary repairs the lineman must climb mountains, cross ravines and ford rivers and creeks. Sometimes he must stand waist deep for hours in snow and water, and when his task is finished, tramp back miles through snow-choked and ice-bound forests before he can reach the shelter of his humble home. They are heroes of every-day life, these brave men. No one applauds their courage, no poet sings their praises, yet they daily submit to exposure and perform exploits of daring that are not surpassed in actual warfare. The Susquehanna, Juniata, Lehigh and other streams whose waters flow toward the Atlantic coast are lined with the homes of these thrifty workmen.

There are two classes of operators—the pumpmen and the linemen: the first squad looks after the pumps and see that nothing checks the flow of oil; the other force lays new pipe. These men are really charged with the responsibility of bringing to Philadelphia, New York and other cities the oil which is so necessary as fuel and illuminant.

When the oil gushes from the wells of McKean and other northern counties it flows into pipes and is pumped into a central station. Thence over mountain, under river, through village and across farm, it is carried direct to the great cities without once being removed from the pipes. To what degree this method of carrying oil has cheapened the cost of transportation cannot be exactly computed. The figures are locked, with other secrets, in the inaccessible archives of the Standard Oil Company. It is known, however, that when oil was carried overland, on railway trains and barges, it cost $3.60 to bring a barrel from McKean county to Point Breeze. Now the same quantity of oil can be pumped here for 10 cents. As this is a saving of $3.50 per barrel, and 80,000,000 barrels are sent East every year, it will be seen that the pump line has been a good investment for the oil baron. It is but fair to add that the consumer has shared this benefit, for coal oil can be bought for one-fifth the price it once brought.

Pipe lines now run from McKean and other northwestern counties, through Lycoming, Sullivan, Bradford, Wyoming, Columbia, Lackawanna, Luzerne, Carbon, Lehigh, Northampton, Bucks and Montgomery counties to Philadelphia and Marcus Hook. The United States Pipe Line carries both refined and crude oil, and is the only company that carries the latter product.

Remarkable feats of engineering are performed by linemen in laying pipes across rivers and creeks by means of pontoons, and up and down the steepest mountain sides. Recently a line was carried to Rock Ledge Station, 2,800 feet above sea level, over a circuitous route of eight miles around the mountain, the distance from the top to the base of the latter is 800 feet. Another line was laid to Bear Creek, one of the highest points in the Blue Mountains.

Pumpmen are not only obliged to be skilled engineers, but must be proficient telegraph operators as well. The pipeline companies have a telegraph system of their own. It connects the oil wells with the stations at tidewater, and is as perfect in its operation as talent and capital can make it. Its messages are so sacredly safeguarded by the operators [illegible] war. By this service the oil barons can learn quickly the number of millions of gallons of oil that can be promptly placed on the market to bring about either a decline or rise in prices. This it will be seen that not only are courage and hardihood needed in this calling, but intelligence and a large measure of discretion as well. In fact, these men need all the qualities that are required of soldiers in warfare, and many of those which are expected of the officers who lead the battalion. It is a notable tribute to the high state of excellence in our general population that manual workers can be so readily found among us to engage successfully in toil so arduous and so exacting.

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SINGAPORE A MODEL COLONY.

THRIVING CITY WHERE A JUNGLE WAS EIGHTY YEARS AGO.

Millionaires and Mansions by the Score, Docks by the Mile, Banks and Business Buildings and as Cosmopolitan a Population as There Is in All the East.

On the little island of Singapore, which only eighty years ago was a jungle, England now has a colony of 200,000 inhabitants. It has hotels accommodating hundreds of guests, mansions and millionaires by the score, yachts and fine clubhouses, and it is one of the most important financial centres of the British Empire in the East.

Fifty steamship lines connect the colony with the rest of the world. Its Post Office handles 8,000,000 pieces of mail every year. It has miles of docks visited by a thousand vessels every month.

There are no customs duties whatever, yet it has a revenue of $2,500,000 a year and a credit balance at the end of every year. And in the midst of a population which is one of the most cosmopolitan in the world, a small garrison of little more than three battalions and a police force of less than 2,000 men keep life and property as secure as in the city of New York itself.

Singapore is an object lesson in model colonial government, and the most interesting thing about it is that it has been created in face of difficulties very like those now confronting the United States in the Philippines. The climate and soil are about the same, the plots and struggles against British rule in the past have been very similar to those now in progress in the islands a few thousand miles to the northeast and the race under British rule is second cousin to Uncle Sam's troublesome Filipinos.

It isn't a large island, as islands go; only about 145,000 acres in all and only about one-seventh is under cultivation, and it is only an hour's paddling in a canoe to the even wilder mainland. But good roads run through the island in every direction. A big city surrounds the harbor, now a port of call for every steamer bound from east to west, and where the jungle was thickest are fertile plantations of sago, tapioca and sugarcane.

On a hill overlooking it all stands Government House, the residence of the Governor, Sir Frederick Cardew, K. C. M. G. It is a palace even finer than the White House and the Governor is less accessible than the President of the United States. His jurisdiction extends beyond the island to five of the States on the Malay Peninsula and even into Borneo, and his power, with the slight check imposed by a Legislative Council, is practically absolute.

The street scenes in the city are as picturesque as could be imagined for the stage. In the 200,000 population there are only 6,000 Europeans and Americans. For the rest there are about 150,000 Chinese, 16,000 East Indians, about 1,000 Arabs and then Hebrews, Japs, Siamese, Parsees, Armenians and representatives of every race in India and Burmah.

You will pass a Chinese merchant in gorgeous silks flitting over the road on an American bicycle, his wife resplendent in gold and diamonds, driving in a carriage with liveried coachman and footman, then a yellow Chinese jinrikisha man in short blue drawers, with torso bare and straw hat set sidewise on his head.

Next may come a brown Malay in a velvet cap and red gown, a coal black Kling from Hindoostan in a white sheet and turban, an Englishman in white duck and pith helmet, tall Sikhs in turbans of black, yellow and red, and Parsees clad in sober black.

There are wealthy white-clad Kling women, as black as coal, with ears and noses pierced by heavy jewelled rings as big around as the bottom of a tin cup; Malay women with faces half veiled, small-footed Chinese women with well-smoothed hair and rouged faces and white-faced European women longing maybe for the shady lanes and cloudy skies of England.

The Chinese are the most prominent figures in the business life of the colony. They are the shrewdest merchants and the best financiers. They are the cashiers and accountants and they have yachts and play cricket just like the British.

A Chinaman occupies a prominent place in the Governor's Council and their secret societies are almost all-powerful in the mixed population. One society alone has a membership of 30,000.

The bankers and the usurers are the Parsees and the Klings, the latter the thriftiest race in the Far East. They lend money to the Malays and the other native races and make them pay heavy rates for slim accommodation.

An American electric plant lights the docks, the hotels and the principal houses. American-made bicycles are a prominent feature in the traffic. American enterprise is seen in a hundred odd places and as many ingenious devices, and American influence has been extending steadily in the last two years. As trade with the Philippines grows, it will extend still more for in Singapore they look upon the new American islands as a future El Dorado of the Far East.

Though there are no customs duties in Singapore the Government always comes out of the year with a credit balance. Its $2,500,000 income is derived from land taxes, stamps, licenses, port and harbor dues and postage. One third of it goes in salaries and throughout the East there are no abler nor better paid officials than the British in the colony of Singapore.

SHALL STUDENTS DRINK BEER?

President Pritchett of Boston Replies to Criticisms of Methodist Ministers.

BOSTON, Dec. 28.—President Pritchett of the Massachusetts Institute of Technology has written a letter to the Methodist ministers, who on last Monday adopted resolutions condemning a technology "kommer" at which beer was served and pipes smoked. President Pritchett says he investigated the matter and found that although ninety-seven men were present at the gathering, only fifty-six pints of beer were consumed.

"I regret that I have been put forward as an advocate of a beer culture," writes the President. "I am not likely to advise any man to drink beer or wine. At the same time, I believe that there is a use of beer and wine which is right and proper and another which is wrong and degrading, and whenever I have had occasion to speak with students on this subject I have put forward some such statement as this.

"The question comes before me in this practical form: Shall students be allowed to come together in informal gatherings for discussion of topics of technical and general interest in buildings under my control, with instructors present, where an inexpensive and simple lunch is served and the drinking is restricted to a moderate use of beer, or shall they be sent to hotels and restaurants where expensive dinners are the rule and all restrictions are removed. In my judgment the first position is the truthful one and that which will help the boys to temperate and clean living. [illegible]

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