

## ABOUT THE BOERS.

### THE PIONEERS OF CIVILIZATION IN AFRICA.

#### Why They Hate the English So Intensely—How They Punish Intemperance—Ideal of Womanly Beauty.

To those who have not lived among the Boers it is almost impossible to form any idea of the real state of things in the Transvaal, or to understand the thousand and one petty annoyances which infest the daily life of the English under the Boer rule. A Boer hates nothing under the sun more than an Englishman. I say Englishman, for a woman, be she English or of any other race, is treated with kindness and consideration by the roughest Boer to be found in the wide of the Transvaal.

This hatred is the heritage of every Boer since the days of the first English invasion, two centuries ago, when General Craig was appointed the first governor of the Cape. A century previous to this, the French refugees, or Huguenots, emigrated to the Cape, and to this blending of the Dutch and French race we owe the Boer of today. The patriarchal spirit which dwelt in the old French refugees and built its code and manner of living on the Bible still lives in their descendants. It has made them the scouts or pioneers of civilization in Africa, this desire to live a simple pastoral existence. For two centuries they have been flying from the English rule, since English rule meant wealth and advancement; but the English are ever at their heels, and hence the Boer's hatred of his would-be conquerer and leader into a richer, fuller life.

When at last the Boer emigrant found the goal of his hopes in the wild untrodden region of the Transvaal he believed himself forever free, and settled down under the benign sway of old Andries Pretorius, to rear for himself a state after his own heart, but, alas! the irony of fate overtook him, and the poor Boer awoke one morning to find his country turned into a land of gold and diamonds, the English again at his farm gates, ready to enrich him and the whole world by their enterprise in the gold and diamond fields.

This time the Boer hearkened more readily, for the reign of the Pretorius father and son, had rendered the emigrant farmers more susceptible to the advances of civilization, and taught them the worth of money as well as the value of their land aside from its farming and sheep-rearing industries. It is needless to go into details, which have become matters of history now; suffice it to say that when Mr. Gladstone practically sacrificed English interests in the Transvaal, the republic was proclaimed, with Kruger, Jonbert and Pretorius as a triumvirate. Pretoria was made the capital. Things were going very badly for the Boers; in fact, the financial state of the little republic was at a very low ebb indeed, when, at this critical moment gold was discovered at South Kaap. The first reef was Sibea Reef, and in a trice a town sprang up—the beautiful town of Barberton. This was the first of the famous gold-reef towns, and the new order of things put new blood into the tottering fortunes of the young republic. But soon gold was discovered on the Witwatersrand, which was then thrown open as a public gold field, in which every one and any one had a right, provided they pegged out their claims and paid the taxes demanded by the Volksraad. This brings us to Johannesburg, which was, from a camp of a few straggling tents and shanties, quickly converted into a town and then to a city of such marvelous growth that it may well be called one of the wonders of the world.

In this rapid development, the Boers speedily made it "hot" for the English, who had built up the gold fortunes of the town, to say nothing of the whole Rand. In fact, the Englishman soon found that the Boers considered him little better than the Kafirs, and here I will give a strong illustration of this, that has its ludicrous side also.

One day the "camp" was horrified to hear of the flogging of a white man for drunkenness. The sensation was so put it mildly, tremendous. No protestations could prevail on the Landdrost to change the law—an old one, strictly enforced, as the Boers are great advocates of temperance. The consternation can be more easily imagined than described of the desperate ne'er-do-wells who swarmed to the camp in search of a fortune. To be deprived of their whisky through fear of the lash! It was a terrible state of affairs, and filled the respectable portion of the community with secret amusement. Nevertheless, it soon became a great evil and degradation to the white man, English or otherwise, to be brought to the level of the Kafir through the medium of the whip.

Another system of curious practice was that known as "jumping," viz., stealing another's claims, which consisted in paying up overdue taxes unknown to the original owners of the gold claims, and taking possession of the ground "right under their noses," so to speak.

Aside from all political and financial questions, the Boer is not a bad neighbor, neither is he an uninteresting friend or companion. He has a certain wit and sense of humor of his own, which may be not quite clear to the stranger at the first blush, but is exceedingly clear to a closer acquaintance. He is gallant likewise, the fair sex has an abiding charm for him, albeit his ideal of beauty is not exactly on a par with ours. A fine, healthy, plump vron is to him as attractive as the grace and delicacy so necessary to attractiveness in a woman according to the English taste. With the Boer the substantial is a great quality, be it in his woman or his life stock, from the sheep to the horse.

The Boer has many virtues, not the least of which is that of temperance, and no doubt to this the Boer owes his splendid health and fine appearance together with that clear-headedness which has stood him such good service in the many exciting wars through which his country has passed recently. One of the most fatal things in a climate like the Transvaal is the tendency to "booz" too much. That, together with bad food and lack of sanitation, "killed off" more Englishmen in the early days of the Rand than any privation or hard work endured by the digger and prospector of those times.

A last word for the Boer women, who are a kindly, hospitable class, albeit a trifle stupid to the average European. They have all our love of fashion and predilection for shopping, as the fine shops of Johannesburg prove. —St. Paul's Magazine.

### OBSTINACY OF LLAMAS.

#### Mules Are Vacillating Compared With These Stubborn Brutes.

The boy called "Un-pa!" to the llamas, lifting his finger as if to point up the trail. Ordinarily they would have obeyed; but the aggressive manner of Barton had roused their obstinacy, and they did not budge. The boy put his shoulder to the ribs of one, and heaved hard; but the brute stood its ground.

"Well, it is to wait!" said he; and ran about the path, gathering up very small pebbles until his shabby hat was full. Then he sat down on a boulder that jutted from the back, settling himself as if for a long rest. Then he threw a mild and measured pebble at each llama. They turned their heads a little and wrinkled their noses. He waited for some time and then pitched two more pebbles—which had the same effect. So he sat, slowly and mechanically tossing his harmless missiles upon the dense hair of his charges. Evidently he was in no hurry; and the two travelers, impatient as they were, had too much wisdom of experience to try to push him. They sat quietly in their saddles, watching the droll scene. It was very ridiculous to need deliverance from two stupid beasts, and to get it from such an unwilling little tatterdemalion. His ragged clothing was of very thick coarse cloth; and upon his feet were the clumsy yanquis or raw hide sandals of mountain Peru, and he wore thick stockings rising to his knees. Over his trousers was a curious garment, half apron and half leggings; and over-sleeves of the same material, hung with a cord about his neck, came up over the elbows of his coat. These two garments, were knit in very strange patterns, amid which were square, brown llamas wandering up and down a gray background. Around his waist was a woven belt, now very old, but of beautiful colors and workmanship. And his face—what a brown round riddle!

"How do you call yourself, friend?" asked the professor, in Spanish. "And have you ten years or a hundred?" "Ramon Ynga, senior. And the other, I do not know. I have been here a long time—ever since they built the mill at Casapalca." "You must be about fifteen, then. And where do you live?" "There, above," answered Ramon, tossing another pebble.

"A curious habit of the mountaineers," said the professor. "These mountain Indians, instead of living in the valleys, climb to the very top of these peaks, and build there their squalid stone hovels. They seem to think nothing of the eternal clambering up and down."

An hour crawled by, and the stones in Ramon's hat were running low. Suddenly the brown llama turned with a snort of disgust, and strode off up the trail. The gray one hesitated a moment, snorted—and followed. "That way they get tired, sirs," said the boy, emptying his hat and pulling it down upon his thatch of black hair.

"I'd take a good club to them!" growled Barton, who had great confidence in the Saxon way of forcing things.

"No, the boy is quite right. It is another case where you must not try to be smarter than nature. The llama is the stubbornest brute alive; a mule is vacillating, compared to him. If you put a pound too much on his load, he will lie down; and you might beat him to death, or build a fire beside him, but he would not get up. Nobody but a Peruvian Indian can do anything with a Peruvian camel, and Ramon has just shown us the proper tactics. Hurt the animal, and he only grows more sullen; but the pebbles merely tease him until he can no longer bear it. And really he repays patience when he behaves well, for he is the only animal that can work effectively at these terrific altitudes, where horses and mules are practically useless. But adelante (forward!)—St. Nicholas.

### Trees Five Centuries Old.

Gerike, the great German forester, writes that the greatest ages to which trees in Germany are positively known to have lived are from 500 to 570 years. For instance, the pine in Bohemia and the pine in Norway and Sweden have lived to the latter age. Next comes the silver fir, which in the Bohemian forests has stood and thrived for upward of 400 years. In Bavaria the larch has reached the age of 275 years. Of foliage trees, the oak appears to have survived the longest. The best example is the evergreen oak at Aschoffenburg, which reached the age of 410 years. Other oaks in Germany have lived to be from 315 to 320 years old. At Aschoffenburg the red beech has lived to the age of 245 years, and at other points to the age of 225 years. Of other trees, the highest known are: Ash, 170 years; birch, 160 to 200 years; aspen, 220 years; mountain maple, 220 years; elm, 130 years, and red alder, 145 years.

### NOTES AND COMMENTS.

The British are nicknamed beefeater not without reason. The annual consumption of meat in Great Britain per head is 124.8 pounds, of which 65.7 is beef, 28.3 mutton, 28.6 pork, 2.2 other kinds.

Figures just compiled show that during the year 1893 seventy-four railroads, aggregating 29,340 miles of track, became insolvent, while the totals for 1895 show only thirty-one roads placed in the hands of receivers, covering 4,089 miles of track.

A savings bank of New York keeps a record of its depositors. During the year 1894 there was only one actor, while there were 1,392 tailors; there was but a single editor, while there were 725 laborers; there was but one boarding-house keeper and 337 peddlers. There were lots of shoemakers, bakers, barbers, waiters, cigar-makers, but very few musicians, liquor dealers, lawyers or policemen. Only five policemen, five lawyers and one soldier.

Last year the state of Mississippi bought three large tracts of land upon which to set its 250 convicts to work under the direct supervision of the state authorities. The result was that the state received 3,200 bales of cotton of 500 pounds each, 50,000 bushels of corn, 1,100 tons of hay, 47,000 pounds of pork, 55 barrels of molasses and 2,200 bushels of peas, all of which sold for \$115,000. The cost of the land and the expenses of the year for farming utensils, live stock, etc., amounted to \$95,000, leaving a profit of \$60,000 to the state.

There lives a woman in Middle Tennessee, who without ever moving from the house in which she was born, has been a citizen of two states and five counties. The explanation is that her farm lies upon the state line, just where several counties meet and corner. The early surveys were not over-accurate, so new lines have been run repeatedly, yet never to the full satisfaction of the authorities. In the changes the dwelling has been set now in this jurisdiction, now in that—and the owner of it has paid taxes, usually under injunction, to five sets of officials.

A number of capitalists in Germany have agreed to join forces to make a practical test of the air ship invented by Count Zeppelin, of Wurtemberg. Zeppelin's plans had the indorsement of the great Helmholtz, and they have been pronounced practical by various scientists. They depend for buoyancy on hydrogen gas, and for motive power on an oil-motor made of aluminum. Meantime Prof. Maxim in England, and Prof. Langley, in America, are also prosecuting experiments in aerial navigation, the lifting power of aeroplanes being the principle they are developing.

In his department in Harper's Mr. Charles Dudley Warner writes of women and the bicycle. He does not think that riding the wheel is a graceful performance for either sex, but he gives the palm for grace to women, "because they sit more erect and have a regard for appearance, and do not slump the back and imitate the cunning attitude of the monkey on the ring pony." The thing that keeps bicycling from being graceful is the treading. When we can do away with that we will have more grace, but not as much health. It is the exercise of treading that puts color in the cheeks and adds brightness to the eye.

Dispatches from the far West tell of the spread there of the gold-hunting fever that now rages in every quarter of the habitable globe. In the Black Hills of Dakota the quest goes on energetically and scientifically, with the aid of machinery and backed by large amounts of capital. Abandoned places are to be worked, new mines opened and bearing mines more thoroughly explored. Far out on the borders of the remote Colville Reserve in the Cascade Range thousands of prospectors and gold-hunters invited disease and death while waiting for the opening of these Indian lands, which are reported to contain mineral wealth of incalculable value. When it comes to a rush for undeveloped gold fields hardships, perils or even death cannot daunt the man with the fever in his veins.

A German expert, after a careful estimate, has announced that the total length of telegraph lines in the world is 1,062,700 miles, of which America has 454,600 miles; Europe, 380,700; Asia, 67,400; Africa, 21,500; and Australia, 47,500 miles. The United States has a greater length than any other country, 403,900 miles, and Russia comes next, although European Russia is only slightly behind Germany, and the United Kingdom has 280 miles of telegraph for every 1,000 miles of country.

A Chicago clergyman has taken the expert testimony of fifty young women of that city as to the Chicago man. The unanimous opinion was that he was conceited and wanting in deference to women. The first of these charges is not of any particular moment. All men are more or less conceited. The difference, however, between the masculine conceit and the feminine quality of vanity must be borne in mind. The second charge is a very serious one. Deference to woman is a quality the absence of which is incompatible with everything like refinement. It is at the base of all civility. It keeps men from the easy familiarities which are the marks of the social degenerate. It promotes the reserve, which is the first and most necessary thing in the social relations. A man who is not deferential to women,

and habitually so, will not be tolerant to his fellow man.

Roentgen's experiments followed as they have been by the efforts of other savants along the same lines, together with wide newspaper discussion, have given popular thought and common conversation a tendency toward the scientific and the abstruse. Roentgen says, X rays, cathode rays, ultra violet rays—the words as familiar to the ear as the alphabet. Stated briefly, Professor Wilhelm Konrad Roentgen has found a means whereby articles behind opaque substances, or contained therein, may be photographed and their position accurately defined. The pictures thus obtained are light—often shadows only on the plate. Their character is determined by the relative density of the inclosing matter. If the envelope present slight obstruction to the X rays the impression of the object whose photograph is sought is proportionately distinct. It is easy to see that this discovery may be put to great practical use, and it has for that reason excited an interest almost universal.

An enterprising Long Islander has taken pity on all pet dogs and their owners. Henceforth no one of them all need go to a plebeian grave. A cemetery is to be opened for the exclusive use of mistresses of canine pets, and suitable burial paraphernalia will be furnished for all sizes and all breeds. Coffins and flowers are to be a specialty. This enterprising woman feels that sufficient honor is not done to dead dogs, and feels how difficult it is to secure a fitting place for interment. As this spot, on a gentle slope near the water and not forty miles from New York, will be purchased for the purpose held in view, no demur need be feared. Owners of pugs can now rest in peace. Being an artist in her way, the Long Island woman has many plans for the selection of appropriate flowers. She feels that the only Saxe to whom proper honor has been done was one who was laid out in a white satin coffin while his body was covered with English violets. The grave itself was lined with hyacinths, all unsullied white.

According to the treasury estimate the American cotton crop of last year amounted to 3,769,381,000 pounds, of which amount 2,628,000,000 pounds were exported to Europe. Of the total European exports England took 1,425,451,000 pounds, or more than half. According to English estimates the value of the total English consumption of raw cotton was \$33,000,000, or over \$150,000,000, representing at least the average earnings of 500,000 laborers for a year of 300 working days, and the support of about 2,500,000 people, including the dependents of these laborers, but not merchants, factors, railroad employees or others whose livelihood depends on handling the trade and feeding and clothing the labor engaged in it. In its textile industries England has invested the enormous sum of \$1,000,000,000, and Mr. Thomas Ellison estimates its annual production of cottons at \$500,000,000, or about double that of wool. "Nearly if not quite three-quarters of a million people are employed in producing this output. Many of them are miners, but it is not likely to do violence to facts to suppose that at least 3,000,000 people are directly dependent on the industry for their daily supply of food.

### Ammonia and Burns.

A correspondent of the Philadelphia Press writes: "Every day we read in the papers accounts of severe suffering and deaths, which I am sure can be greatly alleviated by the use of aqua ammonia, just as it is sold at the drug stores. Manner of application: Take a swab of cotton, saturate with the ammonia and pat the burn with it. Keep doing this till the fire is all drawn out, which will be in ten or fifteen minutes, but I mention that relief is instantaneous. This application not only relieves but entirely cures the affected part, for it will not even be sore again. My boy, seven years of age, ran headlong into a coffee pot just lifted from the range boiling hot. The liquid ran down his back and to his waist, and when his clothing was removed the skin came with it. We applied the ammonia as above and the boy's only cry was 'Faster, faster,' and in ten minutes after we made the application he was enjoying the pictures in one of the comic papers, and with his clothes all on him. He never complained of any soreness during the same day he was scalded. Do try to get doctors and others to use this treatment. I know that doctors discredit this treatment, because I have spoken to several about it, but in my business we have to use hot lead and tin and frequently get burned by the metal splattering upon us. We keep a bottle of ammonia at hand, and we never have any sore places from the burns."

### Thought He Knew Gold.

The Butte (Montana) Inter-Mountain tells a good gold-dust story of George Wilson, who owned the famous Paris mine in Park county, Mont. Wilson was visited by some Englishmen one day, among whom was an expert of the English pattern—one who knew all about mines and a great deal about everything else, in his own opinion. They wanted to see some of Wilson's gold, and he panned out some very fine colors for their edification. "But that isn't gold," pronounced the youthful expert, after a critical examination. "Me dear fellow, I am a graduate of the English School of Mines, and I know gold when I see it, you know. That is iron." Wilson didn't say much. He just leaned over and took the alleged expert confidently by the shoulder. "Mebbe is isn't," he said, "but don't go and give it away to those fellows down at the Denver mint, for I have been selling this stuff to them for gold all along."

### FOUR-IN-HAND.

#### Short Story of the Civil War, Told by an Old Soldier.

Our regiment was armed with breech-loading repeating rifles; it was a good gun, handy to carry, easy to manage and good to shoot. They were seasoned troops, and they never wasted ammunition, but there were times when naturally, with such a gun, they used considerable, and the colonel always made it a point to keep the boys supplied. The best wagon we had we always kept for the ammunition, and the best team; and when the regiment was in action, and in need of ammunition, if it was where a team could go the ammunition wagon was driven right on to the field.

Here, for instance, was the regiment in a cotton field, lengthwise of the furrows, which ran at right angles to a road near by; the left of the regiment may be thirty rods to the right of this road. Other troops in line to the right and left of us, stretching across a country, part fields, part woods. Waiting here for a movement somewhere else; part of the general plan. Enemy in front, more or less firing going on all the time; been at it now for an hour or two, and ammunition beginning to get low; colonel sends back for the ammunition wagon.

The driver might cut off a little by driving across the field, but he doesn't want to cross those furrows with a load of ammunition banging and slamming around in the wagon; he might lose it—so he comes straight up the road. He's got as good a four-horse team as any man could want to drive, and no man could drive it better than he does. No running or cantering or anything of that sort, but he comes up the road at a good square speed trot, plumb to the line, and swing to right and drives along the center of the regiment, swing to the right, and halts.

A man climbs into the wagon and shoves the boxes back so they'll be handy to get at, just as if he might do if were unloading trunks or boxes of hard bread. As he is going on with the work, the driver looking back now and then to see how he is getting along, a piece of shell comes over somehow and strikes the off leader on the haunch and scoops out a piece big enough to lay the crown of a cap in. The horse jumps and plunges, but the driver soon has him down on his feet again and standing all right, minding the driver, but trembling from head to foot.

"All right, old man!" sings out the man that has been shoving the boxes back, and the driver looks back to see if he's put his tail-board where it belongs, and then he starts his team. This time he doesn't take the easiest way, along the cotton furrows to the road; he isn't going to risk his team in that way; he goes straight ahead across the cotton furrows by the shortest cut, the empty wagon bouncing and bounding, but the driver keeping his seat as well as a cavalryman would keep his in the saddle; letting his elbows flap up a little occasionally, but doing that as much for fun as anything else, because the drive was sort of exhilarating; the team going well, the off leader with the hole in his haunch and the blood running down his leg and off the fetlock, trotting up game and trim, square with the other leader, and pulling his share full. And so they got back to the train all right; but they had to shoot the off leader, after all.—New York Press.

### History of Irrigation.

But although irrigation is both ancient and universal, the Anglo-Saxon never dealt with it in a large way until the last half-century, when he found it to be the indispensable condition of settlement in large portions of Western America, Australia and South Africa. Through all the centuries of the past the art has been the exclusive possession of Indian, Latin and Mongolian races. Its earliest modern traces in this country are found in the small gardens of the mission fathers of Southern California. They brought the method from Mexico, and taught it to the Indians. But the real cradle of American irrigation as a practical industry is Utah. A treasured historical painting in Salt Lake City shows the pioneers of 1847 in the act of turning the waters of the mountain stream known as City Creek upon the alkali desert. This picture commemorates the opening scene of the new industrial drama of arid America.

In the hands of Indians and Mexicans of the Southwest, irrigation was a stagnant art, but the white population has studied it with the same enthusiasm which it bestows upon electricity and new mining processes. The lower races merely knew that if crops were expected to grow on dry land they must be artificially watered. They proceeded to pour on the water by the rudest method. The Anglo-Saxon demanded to know why crops required water, and how and when it could be best supplied to meet their diverse needs. He has sought this knowledge through the medium of agricultural colleges, experimental farms and neighborhood associations. He has thus approached by gradual steps true scientific methods, which are producing results unknown before in any part of the world.—Century.

### The Ways of the Opossum.

Just why the great zoologists of the present day should have chosen to consider the opossum an animal of a lower order than the stupid and helpless sloth, and the third order from the lowest of all, is not so easy to understand as it ought to be. As a matter of fact, nature has done a great deal for the opossum—far more than for the great majority of quadrupeds. Note what the creature is, and can do, and match it if you can. It can eat almost anything that can be chewed—wild fruit, berries, green corn, insect larvae, eggs, young birds and quadrupeds,

soft-shelled nuts and certain roots. It is a good climber, and has a very useful prehensile tail. It forages on the ground quite as successfully as any squirrel. It usually burrows under the roots of large trees, where it is impossible for the hunter to dig it out; but it sometimes makes the mistake of choosing a hollow log. When attacked it often feigns death to throw its assailants off their guard. Like the bear and woodchuck, it stores up a plentiful supply of fat for winter use, when food is scarce; and, above all, the female has a nice, warm pouch in which to carry and protect her helpless young. Instead of leaving them in the nest to catch their death of cold, or be devoured by some enemy.

### They Snowballed the Fire.

The citizens of Smithland adopted a novel method of extinguishing a fire a few days ago. A blaze started in a residence, and when the usual impromptu bucket brigade arrived at the scene it was found that no water was to be had, every available supply being frozen and the ground covered with snow. Finally a bright idea struck some one in the crowd, and the suggestion was made that the party should use snow to subdue the flames. The excited citizens divided, and one company rolled up snow balls about a foot in diameter, and passed them on to others, who heaved them over on the rapidly consuming structure. The house, being on a hillside, made this an easy matter, as they secured a good vantage ground on the hill above the house, which rendered it an easy matter to throw the snow over with accuracy and effect. To make a long story short, the fire was extinguished before it gained any headway in the main building, and the floors in one or two other rooms were saved. The people in Smithland are still talking about how they put out the fire.—Paducah (Ky.) Standard.

### Brittle Finger Nails.

Many women who have pretty hands are constantly mortified in cold weather by the rough appearance of their finger nails, caused by the fact that they break and split. The intense cold causes the nails to become brittle that it seems impossible to trim them so as to make them smooth. The possessor of such nails should cut them with nothing except well sharpened manicure scissors, and the nails must never be cut or filed unless the fingers have first been soaked in warm water. The brittleness may sometimes be lessened by rubbing almond oil thoroughly into the nails and finger ends on retiring at night. An old pair of kid gloves must then be pulled on. The house-keeper whose nails break easily should never stir anything on the hot range without first slipping on a loose glove, as the dry heat from the fire will make her nails more brittle than ever. Neither will she allow herself to stay out of doors for a moment without having her hands protected from the cold, which is even more injurious than the heat.

### Hired Swains.

A curious custom prevails in some provinces of Holland during the carnival season, according to the Buche fur Alle. Young women of the working class, especially domestic servants, who have no sweetheart of their own, are in the habit of hiring "followers" for their Sunday out, or for the whole of the Carnival period. These lovers are by no means to be had very cheap. Often two or three nails a lover among them, if he comes too expensive for one girl. This temporary lover has many duties to perform. Of course, he must be good looking and well dressed, and an efficient and indefatigable dancer. Besides receiving a variety of valuable presents from his "girls," he is "found" by them in victuals and drink. If a young woman can afford to engage a "swain" all to herself, so much the better, for the hiring often develops into a real lover and ultimately into a husband. It can thus be said, that in some districts of Holland, the girls do all the wooing.

### New Use for Bicycles.

The French have applied the idea of the bicycle to a fire engine. The machine was designed by M. Schoedelin, according to La Procellette. The men in the saddles, who propel it to the scene of the fire, employ the same power to force water through the hose, a simple change in the gearing transferring the power from the wheels to a rotary force pump attached to the machine. The two arms running back from the rear axle, much as do mudguard braces, are let down when the machine is ready to work at a fire and serve as stanchions to hold the machine firm. At the same time they raise the rear wheels from the ground, permitting them to revolve without moving the quad. Gear wheels are then thrown into action with the rear hubs and serve as the power to work a rotary pump hung in the rear frame.

### The Fake Telescope.

A well-known scientist, walking along a London street, came across an itinerant astronomer, and applying his eye to the instrument was astonished to see a beautiful full moon, although at the time the moon was only in her second quarter. The instrument was not a telescope at all, but simply a tube, with a hole where the eye-piece should be, and a transparency of the full moon, with a light behind it, at the other end. On the scientist asking the exhibitor how he could so cheat the public, the man simply remarked: "It's all right, sir. I used to have a proper scope once, but I turned it up for this after an Irishman pitched into me for showing him only 'arf a moon. This way pays better and gives more satisfaction."—Argonaut.