

THE BOERS DEFY THE BRITISH.

Elaborate Preparations For War Made by the Transvaal Republic.

PRESIDENT KRUGER'S STAND

General P. J. Joubert, an American, is the Commander of the Boer Army Consisting of 25,000 Well-Armed Warriors.



PRESIDENT KRUGER AND HIS ESCORT.

In a little whitewashed cottage in South Africa sits "Oom" Paul Kruger, defying the whole British nation. It is one of the strangest spectacles of the age to witness this seventy-year-old Boer, the head of one of earth's weakest nations, raising himself against the aggression of its strongest power. It is like a fawn pitting its strength against that of a lion.

The present differences between the British Colonial Secretary and the South African Republic are but a continuation of the old troubles with the addition of a new phase. For fifty years England has asserted that the Transvaal is a mere dependency, with no right to make laws for herself, unless they are sanctioned by the Imperial Government. The Boers have steadily maintained that the agreement between the two nations, as arranged at a London convention in 1881, gave to England only the power of supervising international treaties. President



PRESIDENT KRUGER AND HIS WIFE.

Kruger, who was a member of the London commission, has asserted, with characteristic vehemence on several occasions, that England has no right to interfere in the Transvaal's private affairs, and that such interference will not be tolerated.

The British Colonial Secretary, spurred on by Cecil J. Rhodes, England's empire-maker in South Africa, has been persistently trying to extend his authority so that the entire law-making power of the Boer Volksraad should be under his jurisdiction and control. He has demanded that all laws and treaties, whether relating to the internal or external interests of the republic, shall be referred to him for his approval before operative, and he has asked that old laws which are not favorable to English interests in the Transvaal shall be repealed. This interference has naturally been provocative of much ill-feeling not only

devise is done to embarrass the Government.

The amazing part of the situation is that none of the American, German, Dutch and French residents of the Transvaal—and there are many thousands of these in business in the country—joins with the Englishmen in protesting against the laws of the Boers. Their sympathy with the Boers was shown at the time of the Raid, when all of them ranged themselves on the side of the Kruger cohorts.

The War Department Intelligence Bureau in Washington has collected a mass of valuable information regarding the armament and equipment of the Boer Government. According to the data at hand it is learned that the Transvaal authorities within the last four years have equipped the artillery branch of the army entirely with Krupp guns. The pieces embrace standard field guns of 2.95-inch calibre, and in addition, mountain guns of 2.36-inch calibre and bush guns of 1.46-inch calibre. The field guns are mostly of the lighter Krupp variety of twenty-eight calibres length. It is this type of weapon which the Chilean army used in the late war in Chile, and for rough country work the Krupps declare it to be the best piece of ordnance turned out in Europe.

The 2.36-inch mountain gun is capable of being transported on the backs of three mules; one mule carries the barrel, a second the carriage, and a third the wheels and shafts. The normal weight for each animal amounts to about 199 pounds. To this must be added the weight of the saddle and equipment, making a total of 287 pounds per animal. In the United States 300 pounds is deemed maximum pack-weight for a strong mule. The Krupp bush-gun in the possession of the Boers consists of a piece of very light weight, and one capable of being transported in all places, even over the most difficult ground. This type of gun has been used in a number of punitive African expeditions.

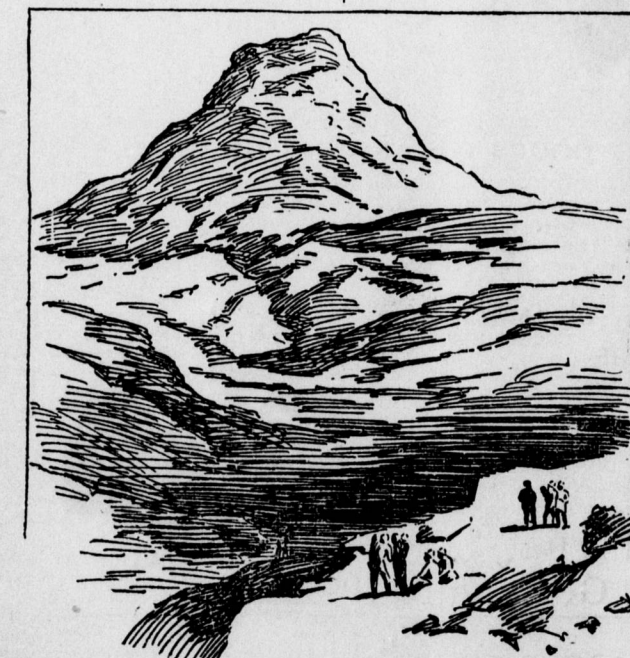
The Boer infantry is now armed with the latest type of Mauser rifle, the handiwork of the Loewe works of Berlin. The cavalry carry German regulation revolvers and sabres. According to the military attaches' reports, the Transvaal forces are essentially German in equipment and drill, and the fact is also noted that many commissioned officers in the Boer service learned the art of warfare in the German army. There is good reason to believe that there are, even now, many German officers with the Boer troops, who are simply absent from their regiments in Germany, on leave. The fact that the German Government permitted,

square" in South Africa, and he is confident that he can do it again. As commander-in-chief of the Boers he is the man who may have the task of trying to whip the English forces in battle. General Joubert is an American, having been born in Uniontown, Penn., in 1841, and few men have had a more picturesque career or know as much about the relation of the Transvaal to the Swazies. When fourteen years of age he left this country and went to Holland. His taste for war was always keen, and when the rebellion broke out he came to this country and served in the navy under Admiral Dupont. Later he became captain of a colored company under General Weitzel. After the war he returned to Holland, and later went to South Africa. When the rule of the English became intolerant to the Dutch at Cape Colony and Cape of Good Hope,



GENERAL JOUBERT, COMMANDER OF OOM PAUL'S FORCES.

and many of them went north to the Transvaal, General Joubert went with them. After he had assisted them materially in driving out the wild beasts, conquering the savages, settling the country, discovering an 1 developing the diamond fields, the English suddenly discovered that they had a claim to this far away country. He was only a plain Boer, or farmer, when his fellow subjects determined to resist the British. In 1881, at the head of a handful of Dutch farmers, he met the British army at Majuba Hill and put it to flight after great slaughter. This secured liberty for the Boers, and they accordingly look upon General Joubert, now Vice-President of the South African Republic, as the Washington of their country. General Joubert visited this country in the latter part of 1890 for the purpose of arranging an exhibit at the World's Fair for South



MAJUBA HILL AT THE PRESENT DAY.



[Showing the British troops fleeing before the deadly fire of the Boers at the battle of Majuba Hill, February 27, 1881, when Sir George Colley's defeat ended the war and resulted in the recognition of the independence of the South African Republic by Great Britain.]

African products. While in New York the Holland Society arranged many receptions and dinners in his honor.

Cuba as a Future Winter Resort.
The entire island of Cuba is a great park that needs no artificial training to enhance its beauty, and it is destined to become the winter resort of all the Eastern States. But great administrative improvements in the ports, besides the police and material ones noted, will be necessary before this can happen. For instance, it would do much for the island if the port of Havana could be freed from the high pilot fees, anchorage fees, docking fees, and fees of all sorts that make it impossible for small craft to enter. Even the large steamers do not dock, but cargo has to be lightered out and passengers are compelled to use the small boats that swarm the harbor.—Scribner's.

between the heads of the two Governments, but between the individuals as well.

To understand the Transvaal situation thoroughly one must know that every British subject in the Transvaal considers that every inch of Transvaal soil is rightfully the property of the British nation, and that the Boers are merely interlopers, with no rights that are deserving the respect of an Englishman. They regard the Boers as so many ignorant, uncleanly savages, who do not know how to govern themselves, much less others. Every Englishman in the gold-fields, or in any other part of the republic, still smarts under the sting of the Jameson failure, and nothing will wipe out that score but the sight of the British flag flying over the whole of the Transvaal. Everything that ingenuity can

openly, German officers to take service with the Turks in the war between Turkey and Greece lends additional confirmation to the report.

In the opinion of many well-posted American officers, the Boers are in far better shape, to-day, for war than is generally supposed. A war between the Boers and English will mean, it is said in official circles here, a much stouter affair than Great Britain has had to deal with in the last thirty-five years. The Boers, at the present time, are in much better shape, and are more ably officered than they were in the last struggle with the English. It is estimated by the various reports that the Boers are able to put into the field 25,000 well-equipped and well-officer men.

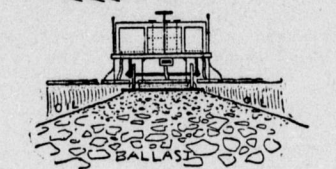
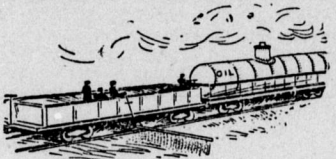
General P. J. Joubert is one of the few men who ever "broke a British

OIL ON DUSTY RAILROADS.

Travel More Agreeable When the Roadbed is Sprinkled With Petroleum.

Railroad officials are enthusiastic over the new system of sprinkling the roadbed with crude petroleum to lay the dust.

The principle is similar by which streets are sprinkled with water. A large oil tank filled with the residuum of crude petroleum is hauled on a flat car as a basis of supply. Another flat car is fitted up with a sprinkling apparatus. The oiling pipes or sprinklers are three. Two project eight feet on either side of the car, oiling the roadbed for that distance, while the other oils the space between the two tracks. A hood comes down and completely protects the tracks themselves from receiving any of the oil. The oiling of the track would make awkward complica-



OILING A DUSTY RAILROAD.

tions in case any of the trains had to stop in a hurry.

The projecting oil pipes are so arranged that they can be drawn in alongside of the car in case of obstructions along the route. The oil train runs at the rate of four miles an hour.

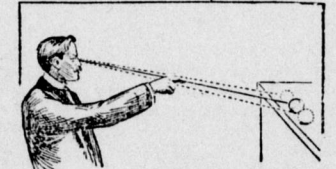
It is claimed on behalf of the oil that it saves wear and tear on the running parts of the rolling stock; protects the draperies in cars and the contents of freight cars from destruction by dust; prevents vegetation from growing on the roadbed and saves track labor.

An Instructive Eye-Test.

Here is an instructive eye-test. Is your right the stronger, or your left eye? You are right-handed; are you also right-eyed?

Make this test and see. Place an object of about two inches in diameter, perfectly round, on a level with your eyes and move back from it to a distance of ten feet. Then take sight over your forefinger until the objective point and the tip of the finger are exactly in line with the eye from which you are sighting.

Now open the other eye. With both your eyes open, has the objective point moved to one side? If not the eye with which you first sighted is the stronger, since the addition of the other's vision does not divert the complete vision from the original focus of the one eye. If the object does move to one side it proves that the weaker eye has done the first sighting, which the stronger eye has diverted as soon as it has opened.



TEST TO PROVE WHICH EYE IS THE STRONGER.

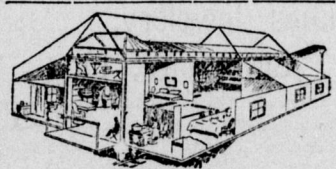
Perhaps there is very little difference in your eyes. Take sight as before, but with both eyes open. Now close the left eye. How far out of line is the right eye?

Whichever is the farther out in these two tests is the weaker eye. If you are strongly right-eyed the right one will hold firmly to the objective point which has been focused by both eyes together when it is left to view the object alone. If you are strongly left-eyed, vice versa.

An Aluminum Hotel on Wheels.

One of the most remarkable of the recent inventions upon which the Patent Office authorities have been called to pass judgment is a traveling hotel, the designer of which thinks he has filled a long felt want by constructing a portable habitation for traveling circuses or camping parties.

The hotel on wheels is made of aluminum and is so constructed as to fold up like a railroad car and to appear when closed to be an ordinary



THE CAR UNFOLDED.

baggage car. When the stopping place is reached and the travelers wish to camp for the night, the sides of the car are let down by means of a series of levers.

The rooms are to be fitted up in the modern style, with all conveniences, including electric light, electric bells and electric cooking apparatus.

The furniture designed for the car is, of course, mostly of the folding variety, and can be stowed away in a very small compass when not in use. When the stopping place is reached the car is to be detached from the train and taken to a convenient siding, where there is ample room for the spreading of the sides and the elevation of the roof that form the hotel. It is a matter of only an hour's work.

FOR FARM AND GARDEN.

Weeding Rye from Wheat.

The wheat-growing farmer dislikes much to cultivate rye, because wherever grown on the same farm some of the rye will find its way through straw or manure to the fields where the wheat is grown. It is not a difficult matter to separate the two grains as they grow in the field together. The rye heads out several days earlier than wheat, and it spires up a foot or more higher, making it very conspicuous. It is an easy matter to go through the fields with a pair of shears and clip off all the rye heads, cutting down low enough to reach those that are behind in growth. Wheat that is free from rye is worth several cents more per bushel, and, of course, wheat free from rye should always be used for seed.

New-Laid Eggs for Setting.

Everybody knows that in hot weather the exposure of eggs for two or three days to summer temperature affects their quality for eating. But it is commonly supposed that for setting in an incubator or under a hen any egg that is from a week to ten days old is as good as one that is freshly laid. This is a great mistake. Unless brooded so constantly that the egg will never be chilled, the germ of life started into growth by heat during the day is pretty sure to be chilled at night. When the young life is started it should never be allowed to get cold. But even if cared for in the best way, the egg a few days old is inferior. Its shell is porous, and as the moisture from the inside exhales through it the air space becomes larger inside, and the shell is harder for the young chick to peck through. The best results are found from setting eggs the day when they are laid, and, if possible, while still warm from the hen which laid them.

Cultivation of Vegetables.

To secure a good crop of vegetables three things, at least, are necessary, namely: a suitable soil, pure seed, and clean culture, to which may be added, as equally necessary, an abundant supply of good barnyard manure, supplemented when this runs short by artificial fertilizers. The exposure of a vegetable garden should be perfectly south or southwest. The soil should be naturally rich and friable, a sandy loam being the best; if the soil be stiff it should be gradually mellowed by the free use of barnyard manure or if convenient by the addition of sand; if wet or inclined to hold an excess of moisture it should be underdrained, preferably by tile, but if possible a location should be selected naturally dry and free from surface water. A dark colored soil or one supplied with a goodly portion of decayed vegetable matter will produce the earliest crops, and to produce the best and most uniform results the vegetable garden should have at least one foot of good, rich soil. The roots of large trees should not be allowed to encroach on any part of the garden, though large trees, especially evergreens, sufficiently far off, afford a valuable protection on the north and west.

Dairy Suggestions.

A cow was fed 14 pounds of corn meal a day and made 160 pounds of butter in 90 days. If another cow of the same herd was fed over eight pounds she began to take on fat. A cow will eat much more rich grain feed, if she is fed succulent feed, than she will if she is not. The ratio of nitrogenous and non-nitrogenous nutrients in the cow's ration should be about 1.6. Selection and good feeding are the road to cow development. Four pounds of corn meal, two pounds of oil meal, four pounds of bran and four pounds of oats make an ideal ration for the cow. A cow that has been compelled to do all that she can do right along, ought to be worn out at nine years old. If the milker is strange, or if the cow does not like him, the milk will contain less butter fat. A cow that is four or five years old will give more butter fat than a two-year old heifer. The greater the quantity of milk, the larger the quantity of butter fat. It is best to get rid of a hard milker. The cow can taint her milk by breathing impure air. There is a great deal of butter that is spoiled by too high coloring. Plant corn for ensilage this year, if milk and healthy cows are desired next winter. If some cows that are utterly profitless, were fed as dairymen feed, and properly cared for, they would prove to be excellent cows. Feed heifers with their first calves, quite liberally. Feed oats in the bundle and save expense of threshing. Turnips and cabbages may be fed in limited quantities 10 hours before milking. Tuberculosis is a local disease, and will attack various parts of the system, sometimes the udder. The more fat there is in milk the more and richer cheese it will make. The covered barnyard is a fine thing for the herd. Have shade in the pasture even if you have to build an open shed. Water that is exposed to the air in a tank, soon becomes foul and unfit for the cow to drink.—The Epitomist.

Poultry for Town Homes.

The selection of a breed of fowls to keep in a limited space requires more care and knowledge than when unlimited range may be given them. When fowls are kept solely for pets and ornament, bantams are most popular, requiring but little room and bearing confinement well. The best breeds are the Golden Seabright, black-tail Japanese and the buff Pekin. Among the larger breeds, well formed, yet not heavy, are the Leghorns, white, buff and brown; the

Killed a Big Indiana Snake.

A very large snake was recently killed near Dismal Hill, five miles northwest of Noblesville, Ind., by Joseph Baker. The reptile was jet black, measured seventeen feet six inches in length and nine inches in diameter.

white and the black Minorcas and Hamburgs. If any of these breeds are selected, especially the Leghorns, must be provided with considerable outdoor space to do well, although if the egg product is not considered they may be kept in narrow quarters if not highly fed. The large breeds, however—Brahmas, Cochins, Plymouth Rocks and Wyandottes—are to be preferred to all others as general-purpose fowls on small lots. They bear confinement well, are good producers of eggs and for table use are unsurpassed. The white Plymouth Rock and the white Wyandottes are very attractive, and for coloring nothing is more attractive than the soft, fluffy buff Wyandotte.

Of necessity the space to be devoted to poultry of the average town lot is small, and the flock should be correspondingly small. For a house of 10 by 20 feet a dozen fowls of the largest breeds or fifteen of the smaller breeds would be enough for comfort. If eggs are not wanted for hatching purposes then no male bird should be kept, for the hens are more content without him and lay quite as many eggs. The house for poultry may be as attractive in exterior finish as one pleases, but it should be warm, dry and arranged so that it can be thoroughly ventilated during the daytime. To keep the fowls in the best possible condition they must have a variety of foods. The grain should be wheat, corn and millet, fed alternate days. Green food, meat scraps and plenty of green fowl, grass or any vegetable they like must be given in abundance.

Land Plaster and Clover.

The extraordinary effect which gypsum or land plaster has on the clover growth has long been a puzzle to scientists. It is not the lime which the gypsum contains, for applications of pure carbonate of lime, though helpful to clover where the soil is deficient in that mineral, do not produce the marvelous effects which very slight applications of the sulphate will under favorable conditions develop. It is doubtless the strong affinity of sulphuric acid for water that is at the bottom of this mystery. Wherever gypsum has been sown on plants they will be covered so heavily with dew that some of the dew will be shaken off the leaves and fall upon the soil. Where the plaster has been sown early and is washed into the soil it condenses moisture into water from air that is already in the soil, and as this air contains a small amount of ammonia, it furnishes just the stimulus that the clover roots require to grow the nodules which develop nitrogen from the air in the soil by decomposing it. "Probably there is in the air at no time more than a small fraction of ammonia, but by uniting this with water, so that the roots can take it up, they are enabled to grow the nodules that have the power to make full eighty per cent. of the air, which is the proportion of free nitrogen it contains, available as plant food.

The best results from gypsum are secured by sowing it early, so that spring and even winter rains and melting snows can carry some of it into the soil, and then with clover follow this up with occasional applications during the early part of the season. The longer the dew remains on clover leaves in the morning the better its growth will be. It is different with corn, which loves warmth, and which is sometimes injured by applying gypsum alone on it early in the season; but a mixture of gypsum and wood ashes or potash in other forms is always helpful to corn. As the gypsum condenses the moisture the slight trace of ammonia unites with the potash and makes saltpetre, which is one of the most stimulating fertilizers known. Another time when gypsum and potash can be profitably applied to all plants is during severe drought, when it seems as though there was no moisture in the air, and even in the morning there will be very slight dew fall. The gypsum always makes a heavier dew fall, and this moderates the effect of dry weather by preventing evaporation of moisture from the leaves of plants.

Peas and beans being leguminous plants are also greatly helped in growth by applications of gypsum and potash, both of which they require in producing their seed. The gypsum alone will make a large growth of haulm, but it will not produce seed in proportion unless potash is also supplied. This is also true in growing clover seed. A liberal dressing of potash early in spring will cause the plants to grow heads filled with seed, while if only gypsum is sown it is probable that most of the clover heads will be empty. Too much stable manure which is rich in nitrogenous fertility produces the same effect as the gypsum. It is, in fact, because the latter supplies available ammonia by condensing it from the air that it makes an excessive leaf growth, which is very rarely accompanied by a large seed crop. We have seen many fields that in the second crop of clover would cut a ton or more of haulm to the acre that produced less than a bushel of clover seed, while a growth of less than half a ton of clover had its heads so filled with seed that it yielded four or five, and in one case we knew six bushels of cleaned seed per acre. This is, we think, nearly always the difference with a greater or less supply of potash in the soil makes in all crops that are grown for seed, while the large growth of haulm with little seed is the result of relying too exclusively on gypsum as a fertilizer.