IN THE FIELD OF ELECTRICITY

Ancient Netions About Lightning Banished by Modern Investigation.

Progress in the Development of Picture Telegraphy-Street Sweeping by Electrical Machines-Output of Copper Decreasing.

The Electrical Review, in discussing the has engaged the attention of natural philosophers since Franklin sent up his historic kite. The net result of more than a century of attempt to secure protection has been the lightning rod, in its more or less inefficient forms, and the discovery that buildings of modern construction having metallic roofs, and often metallic frames as well, hour are practically immune from attack by lightning. The total number of deaths due to lightning in any given summer is com-States. In cities the destructive influence street sweepers ever made. of lightning is exceedingly small, although ber of years and several highly efficient devices have been constructed for this purhonored rule that it is wisest to keep in Recourse to the feather bed of our ancestors, quiet the nerves of timorous persons, while streets will be kept clean by electricity. the ancient superstitions regarding handling steel instruments and sitting in draughts may be utterly disregarded. A modern building in a city is as nearly absolutely lightning proof and those in it are as nearly absolutely protected from lightning as is

Wires Tell the Weather.

There are no more reliable weather prophets anywhere than the telegraph wires perior mines has been considerable, there casions a guest at the White House. For state though it is, and valuable as its great that are now so common as to be "within is no reason to doubt that the product of this alleged intimacy with the White corn crops usually are, does not live by the reach of everyone," as bargain counter all the mines in the world was greater last Father he stood higher in the estimation of corn alone, and its prosperity is by no hustlers express it. This novel discovery year than ever before. was made by a German physician in the following manner: As he was waiting for a copper produced in North America came take charge of the meeting for the reason train at a country station he heard a shrill from the Lake Superior mines. At present that he only speaks the Apache language, sound, which was made by the wind as it those mines, though they yield far more and there were a number of lesser warriors passed through a network of nearby wires. than they did then, supply less than one- at the meeting jealous because of the prom-At once the doctor remembered that he had thirty-fifth part of the North American inence given him. frequently heard a similar sound either im- product. mediately before or after a storm or a heavy and such changes in the weather.

forty-eight hours after he had heard the tion of vehicles. sound at the railroad station he concluded that there was such a connection, and he is not keeping pace with the demand, which then determined to investigate the matter bids fair to increase at a still greater rate faces in one battle. I was then asked if I thoroughly. As a result he now maintains, in the future and for an indefinite period, was not sorry and I said I was not sorry. first, that any unusual disturbance in the A fortune, therefore, awaits the man who Then the medicine man told me I could not telegraph wires is an infallible indicator of will find some way of economizing copper become a paleface. I said to him: 'Do bad weather, and, second, that the nature used for conveying electric currents or of you suppose the paleface would let an of the changes in the atmosphere may be increasing the conductivity of iron or steel enemy shoot him and make no effort to learned from the sound which the wind at small cost, so that it may take the place protect himself? If so, then I do not want makes when passing through the wires,

Thus a deep sound, he says, which is of considerable or medium strength, indicates a sharp, shrill sound is the sure token of a heavy storm, which will be accompanied by nuch rain or spow.

Picture Telegraphy.

Many attempts, more or less successful, have been made to transmit pictures through a telegraph line, says the London Electrical Review. Elisha Gray and others have used the writing telegraph to make facsimile drawings at -a distance, and Sczepanik has devised an aparatus intende: to enable us to actually see by telegraph but this apparatus is complicated and has not as yet been practically successful. Quite recently Herr Otto von Bronk has fevised a simple and ingenious apparatus for printing at the receiver a photograph fire by placing it in a bath of magnesium of any illuminated object placed in front of sulphate. Lead electrodes are used, the of steel wires to magnetic strain, utilized 110 volts is then sent through the wood, by Poulsen in his telegraphone. The image with the result that the sap is extracted or the object is thrown by a photographic selenium cells. Each cell is in circuit with one of a series of electromagnets arranged 1. Part of the sulphate fills up the cells by so as to produce transverse magnetic strains in a ring of steel wire, each strain being, of course, proportional to the intensity of light acting on its corresponding selenium cell. These strains are reproduced on a similar ring at a receiving station by a synchronous rotating arm, just as a telegraphone record would be copied on to another wire moving at the same speed. By reversing the original operation the magnetic copy of the picture is retranslated into an optical one, a photographic nega-tive being produced. The apparatus is described in detail in the Elektrotechnische

Storage Battery Changes

An improvement in the Reuterdahl storage battery, manufactured here, has been made by Arvid Reuterdahl of Providence. At the bottom of the glass or rubber retaining jar are wedge-shaped supports of acid-proof material which is not a conductor of electricity. These support the composite plates and provide space underneath for the acid. Each plate has two parallel flexible side pieces or holding plates of thin sheets of hard rubber or celluloid, which ple from these camps and bring them to this have many small perforations. The electrode is a lead top bar with depending ribbons, which constitute the active material and extend out in close parallel strips. Strips of wood are placed between the holding plates for spacing purposes and the top bar of the electrode is inserted between the plates at the top for the same object. Rods of non-conducting material pass through the holding plates, which are kept spaced by washers on the rods. Notches on the bottom of the plates prevent displacement. Each eletrode has an upward projection and these projections are connected by two bars having the combination previously used in storage batteries. The construction described is said to reduce weight and size, to afford clastic support for the active material and to lessen the liability

of short circuits. Street Cleaning by Electricity.

Electricity now cleans Cleveland streets with a new sweeper, the first of its kind that was given its first working test last It will sweep all the streets on which there are car tracks, with the exception of Superior, which is 200 feet wide and is cleaned by the "white wings" men. The electric sweeper is the invention of General Manager Ira McCormick of the Big Consolidated Electric railway, and grew out of a suggestion by Mayor Tom L. Johnson.

One of the first things the mayor did after getting into office was to start a clean streets campaign. He found that the contractors, working with the ordinary horse-drawn sweepers, charged \$1 a square. He sent for McCormick and called his attention to a forgotten clause in the street car company's franchise that required it to keep its One of the first things the mayor did after

tracks clean. The result is the electric trolley street sweeper that will revolutionize the cleaning of streets on which there

are electric car lines all over the world.

tracks for nothing started the railway manager thinking, and he went back to the mayor with an offer to sweep the streets brough which the lines of his company run TELEGRAPH WIRES AS WEATHER PROPHETS for 20 cents a square, a fifth of the present BIG POW-WOW AT DARLINGTON, OKLAHOMA price the city pays. The mayor told him he ould have the business, and McCormick went to work on his trolley sweeper. He Klowa, built in the company's shops a ponderous car, having, in addition to the motors for driving it, another thirty-five horse-power motor for driving revolving brushes under the car. In front of the car is one brush eight feet long that sweeps the center of the street. Behind is another brush sixteen question of danger from lightning, says in feet long that sticks out on one side of the to their race, the members of the Kiowa, there are entirely too many calamity part: "Protection of property and life from rear of the car. It is swung clear out over Comanche, Apache and Wichita Indian stories of a sensational character being fightning flashes has been a subject that the pavement at the side of the track until tribes have just held a big council at Dar-printed at home and wired abroad about

less. The machine makes a noise like a them. paratively very small-in the ratio of about eyclone, but two dashes through a doubleone to each 200,000 population in the United tracked street clean it better than any other

To sprinkle the miles of streets the occasional fires are caused by it, especially sweeper cleans without stopping, a great to work carrying the well leaved limbs from tunate, is of minor consequence." where gas pipes abound. Protection of sprinkling car with a 5,000-gailon tank is electric circuits from lightning has been an used, the streets being sprinkled to prevent interesting subject for research for a num- dust and make it possible for the sweeper for shade and sleeping purposes. Then a to leave them cleaner. The trolley sweeper great space in the center was cleared of area where dry and hot weather has for is so fast that McCormick thinks the com- grass and sprinkled with a white chalk weeks been working disaster to such crops pose. Today lightning is little feared by pany will make an immense profit at 20 the station superintendent and should be cents a square for sweeping the streets. very little feared by any one. The time- Mr. McCormick's company has over 100 miles of tracks in the Cleveland streets, the open and not seek the shelter of trees and as the sweepers are completed they is one which common prudence dictates. will run over the tracks of Senator Hanna's and not a few on bicycles. Geronimo rode street railway, the Little Consolidated, and all the way from Fort Sill, accompanied, of however, is no longer necessary, except to a large proportion of the infamously dirty course, by a government guard. Although

Copper Output and Electricity. Special correspondence from Houghton, Mich., printed in the Chicago Chronicle shows that the output of the Lake Superior copper mines was less for the calendar year 1900 than it was for the year 1899. The difference is stated at 5,346,525 pounds, or about 2,673 short tons, of refined copper.

A quarter of a century ago most of the it was Geronimo. This old fighter could not

The great increase in the world's output

The supply of copper, though increasing,

Road Run by Telephone.

that there will be slight showers of rain Lackawanna railroad makes the announce- with the sacred white chalk forty-eight hours, and, on the other hand, ment that his road, in the course of a few months, will be operated by telephone, in- time. Then I came forth and did as the stead of by telegraph, as at present, at a others." saving of about 60 perseent in the hire of telegraph operators. He says that the telephonic system has been placed on the Morris and Essex branch, where its use has been successful, and that it is being put in as quickly as possible on the Scranton branch. First, the telephonic system will be given a thorough trial on the branch lines, and if it proves successful they will from New York to Buffalo, totally superseding the telegraph,

Fireproofing Wood by Electricity. By the Noden and Bretonneau process, as

used at Paris, wood is made proof against a lens at the transmitter. Herr von Bronk one being separated from the other by a makes use of the wonderful susceptibility sailcloth diaphragm. A direct current of and is replaced by a non-inflammable salt. and striped shirt. lens on a surface made up of a mosaic of According to the Electro-Chemist and Metallurgist the phenomenon is thus explained: electro-capillarity. 2. There is an osmotic exchange between the sulphate and the salts of the sap. 3. Aseptic action. The process has been applied with success to paving blocks. The treatment lasts for forty-eight hours, the timber being turned over after twenty-four hours. The rate of is about half an electric horsepower at twenty to thirty volts per cubie

OFFERS TO REMOVE THE BOERS Great Britain It Will Relieve

Refugee Camps.

CHICAGO, July 26.-Stirred by the report recently submitted to the House of Lords by Lord Ragian, under secretary of the English war office, of the number of men, women and children who died during June in the refugee camps in South Africa ngton, offered to remove a number of peoountry or transport them to Europe.

The offer was made July 13, through Secretary Hay. The Transvaal league offers to take as many people from these camps as its means will allow, and guarantee to the British government that all people thus removed shall be removed from South Africa. Today word was received the forehead, around over the back of the of millet, sorghum, Kaffir and fodder corn from the secretary that the matter was re- head and almost to the ground, their heads and rye, and the wise farmer will be giving sickly seasons. The occasional use ferred to Mr. Choate in London, with the thrown back and a happy expression on these much attention in the immediate request that he use his good offices in lay- their faces, the Indians did not look much future, besides husbanding the millions of regularity in all the vital organs. ing the matter before the British govern-

CAUSE OF FALLING HAIR.

Dandruff, Which is a Germ Disease-Kill the Germ.

Falling hair is caused by dandruff, which s a germ disease. The germ in burrowing in to the root of the hair, where it destroys the vitality of the hair, causing the hair fall out, digs up the cuticle in little scales, called dandruff or scruf. You can't stop the falling hair without curing the dandruff and you can't cure the dandruff without killing the dandruff germ. you remove the effect." Newbro's cause. Herpicide is the only hair preparation that kills the dandruff germ. Herpicide is also a delightful hair dressing.

Brooklyn Bridge Reopened.

The necessity of sweeping the company's A Eunch of Redskins Coremoniously Invested with Citizenship.

Comanche, Apache and Wichita Indian Tribes Solemnly Proclaim Themselves Fullfledged White Citizens.

With all the pomp and ceremony peculiar it reaches the curb. The brushes are lington, Okl., and declared themselves to be Kansas, and the effect cannot fail to be imwhirled and the car propelled by current full-fledged white citizens, with a right to mense and unjustifiably harmful. This sort taken from the wire over the tracks by the vote at all territorial and national elec- of thing has gone to such lengths that trolley pole, and the dirt is swept into a tions. The power of voting was conferred strangers believe the state is about to be long, neat pile in the gutter. In the first upon them at this meeting by Geronimo, the abandoned or largely depopulated, and even test it swept the dirtiest street in the city, noted Apache warrior. As a matter of fact, some of our own people are losing their Broadway, at the rate of seven miles an they have really had the power to vote polee and business sagacity to the extent ever since they settled upon their allot- of unnecessarily parting, at ruinous prices, This first sweeper cost \$2,800, but succeed- ments. But this meeting was on a peculiar with valuable breeding stock and similar ing sweepers that are under way will cost program and shows how civilization runs in accumulations upon which their prosperity

Several weeks before the meeting, relates cannot be replaced short of years of effort a correspondent of the New York Tribune, and economy. Compared with this a shortthe Indians began to erect huge arbors from | age in the hoped-for corn crop and the dry the limbs of trees. The squaws were put ing up of the pastures, although unforthe forcet, and they were kept at it until the red men had erected fully 200 arbors drouth?" which had been blessed by the medicine as grass, corn, oats and potatoes. Kansans

men for the occasion. As the day for the big meeting drew nearer, Indians came in from all directions. Some were on horseback, others in wagons 50 years old, he stood the trip well, and knowledge of the situation pretends that the was ready to take part in an exciting green corn dance when he arrived.

The meeting was held under the direction

As every Indian drove up he was taken in charge by a medicine man and led to a bushels of old corn was on hand in March. fall of rain or snow, and it naturally ec- of copper began simultaneously with the creek, where he was ordered to bathe. This curred to him to try and ascertain whether use of electricity as a motive power. We was done to wash off all the evil influences crop, and this showing doubtless will be there was any connection between the sound are indebted to the enormous increase in of camp life. Then he was taken into a the supply of copper for the extensive use mud lodge and various secret ceremonies teen counties are heard from, including As a heavy shower of rain fell within of electricity for the propulsion and trac- were gone through with. One of these was such heavy and reliable corn-yielders as described by Running Elk as follows:

"I was asked if I had every killed any one and I told them I had slain four paleto become one of them.' The medicine man areas planted to the great dry-weather-resaid the palefaces were no cowards and he sisting Kaffir corn, well-bred herds and let me pass. Then I was rubbed all over flocks and dairies, and having harvested in the photographer. General Superintendent Clarke of the with the juice of a berry and sprinkled perfect condition the greatest crop of was placed in a sweat lodge for a long sas farmers are, or ought to be, com-

The first day was spent in going through this purifying process. The night was used rather oddly for Indians-they all retired to their tepees and slept. This was done to imitate the good white farmers who rent land of the Indians and who are now the models of the redskins instead of the come into general use on the main line objects of their scorn and laughter. It used to be their idea at night to dance until midnight, then feast until daybreak, and sleep by day. This abrupt change went rather hard with some of them and the young men who could stand it no longer slipped from their tepees to the creek banks, a half mile away, where they danced to their hearts' content. They were severely reprimanded for it the next day, but they had enjoyed the fun. For their frolic they came near not receiving the insignia of the paieface-the beaded vest

Early on the second day Lone Wolf, a medicine man, clad in a white blanket and with a long feather in his hair, started the Indians in the green corn dance. This is a new dance, which has been invented by Lone Wolf to celebrate the occasion. Some of them hop around as if they were following a cultivator, while others sit on the ground as if they were shelling corn. The dance is so much more difficult than all the others largely humanity everywhere relies for that the Indians did not care much about it. But when Lone Wolf told them they must learn it, or they could not enter into the all obstacles in becoming a true paleface trusting his entire chance for success in caused them to go into the green corn any one crop." dance with zeal. It was rather amusing to see the expressions on the faces of the bucks while they were doing this dance. It was too much like work to bring out the cheerful smile so common in the wild dances and most of them looked shamefaced. The squaws sat apart and giggled, thinking, no doubt, that it was great fun to see the men work while they sat by and did nothing. Despite the fact that the Indians weather, which may diminish the possible the Transvasi league of this city has, kept it up for a whole day, as Lone Wolf told them they must do. That night they slept again as the farmers did around them.

A Visit to the Agent. The third and fourth days were devoted to visits to the agent's house. The principal medicine men and warriors put on circle around the front of the agent's house. to the house of the agent was for the pur- feature of every landscape. The agent came out and handed them a growth and for milk production. new silk flag. No thanks were offered. Instead, several young bucks came forward, their feet. It was their manner of honor-Four or five days of speechmaking fol- to by the weather of the past month. lowed and then the Indians gathered at the "Destroy the arbor and signed the following paper, which condition of affairs are not the men who ere treaty, as it was called, was read aloud by the ground and listened. It reads:

"We want to be big paleface voters. Like making haste to sacrifice.

white. No more we go on horse steal trips

COBURN ON CROP CONDITION Calamity Stories About Crop Failures Greater Injury Than

Drouth.

In reply to inquiries as to the present crop eltuation in Kansas Secretary Coburn of the State Board of Agriculture, the most competent and reliable authority on crops

in the west, has the following to say: "What do you think about the sensational reports which are now in circulation as to

corn and forage crops?" "As the situation presents itself to me would depend for the next decade, and that

"Is serious damage resulting from

"Being surrounded by a vast agricultural could scarcely expect theirs to be immune, and very naturally they are sharing to some extent in the unusual and unseasonable conditions so sorely afflicting their neighbors and causing them to unite in organizations to pray for the procrastinated rainfall. No one with any but a superficial corn crop will not be greviously shortened. whatever the future weather may be. There will doubtless be some corn-nobody knows how much or how little, but only a fraction of the monster crop we planted for ninety of Wolf Ears, a tall young Indian who had days ago, and such as Kansas raises ordioften visited Washington and who derived narily. We have 'lost' no corn crop this his popularity from a generally circulated year, as we cannot lose what we have not Though the decrease from the Lake Su- story that he had been upon several oc- yet possessed. But Kansas, premier corn his people than any other one man, unless means wrapped up in the busks of even this wondrous plant. The making or losing of any crop has long since ceased to be more than an incident in its business career." "How is the state situated as to old

"According to complete returns from ninety counties in the state over 27,000,000 or more than one-fifth of last year's total considerably increased when the other fif-Atchison, Brown, Dickinson, Elk, Geary, Jackson, Montgomery, Reno, Shawnes and Woodson, all usually holding over a large big black box, which on closer inspection surplus, and this year will probably find them no exception.

"Is Kansas likely to be 'hard up?" " "With a plethora of money in banks eager for borrowers, old corn on hand, two excellent cuttings of alfalfa already harvested and a third will advanced; large choice wheat ever grown fortable, and many are certainly reposing on flowery beds of ease. It is difficult to imagine that they should register complaints when a kindly Providence has dealt so generously with them year in and year

"About what does the state normally pro-

"Lest we forget how nature has lavished her bounties upon the industrious Kansas husbandmen, it is appropriate to suggest that in the last five years the value of their 860,000,000 bushels of corn has been \$187,000,000; of their 260,000,000 bushels of wheat, \$145,000,000; of live stock products marketed, \$280,000,000, and so on to the end of a long list of wealth-making products for which the state is famous to the ends of the earth."

"Are Kansas farmers more than other people subject to disaster?"

"No matter in what line of endeavor engaged all is not profit nor sunshine. The butcher, the baker, and candlestick-maker, the merchant, banker, miller and mechanic, as well as others, all have their occasional seasons of adversity. If one year's or several years' business prove especially lucrative it would be ungrateful or childish at least, to whimper because the succeeding one was less so. Profits in every business undertaking are likely to vary with the seasons. The farmer is essentially a business man, and upon him their most substantial support. He is not immune from reverses, but he has endeavored to reduce the possible hardships paleface domain, their desire to overcome of such times to a minimum by not en-

> "Are farmers in this state as dependent upon a single crop as formerly?"

"It is as necessary for the successful farmer to mix liberal allowances of brains with his methods as it is for those profitably engaged in any other vocation. Intelligent farmers are coming to more and more realize the truth of this, and as a product of any particular crop does not now so vitally affect their condition. In short, many within the last decade have wisely adopted different crops and methods, that along with others practically insure all such subsistence, whatever the season."

"How is the stock to be fed this season?" "Hay and forage of most sorts now growtheir sun dance regalia and danced in a ing will be scarce and high, but there will be much corn fodder and there is time yet With their long war bonnets falling from for planting and harvesting unlimited areas like ever becoming tamable, but their visit tons of bright straw, now such a conspicuous pose of showing him how they used to do abundant and likely to be as cheap for and how they would never do again. They grain-feed as corn, at current prices, and sang the songs of the ghost dance while those who have used it most pronounce it they hopped around in front of the agency. superior to corn pound for pound for

"The panicky feeling as to feeds stock water will subside as soon as the inand, grabbing it from his hand, raced evitable and overdue rains come and then around the open space dragging it under thousands of men, who usually are selfcontained and level-headed, will be amazed ing the Stars and Stripes, while in any at, if not ashamed of the state of mind they other nation it would have meant an insuit. have allowed themselves to be wrought up

was written out in English and interpreted stampeded into too hastily parting with the to the council in general session. The best of their young stock and breeding animals, but those who tenaciously hold on to Standing Bow, while all the assembly sat on them and, if possible, acquire and care for some of the good things that others are

best gifts are always bestowed." SUMMER RESORT INDUSTRY.

The Man with the Camera Working a Good Thing.

The three new visitors to the summer re sort walked over to the clubhouse and took seats on the shady veranda, relates the Chicago Tribune. They lolled luxurlously in the easy chairs and looked out across the wide green lawn to the blue waters of the lake beyond. Suddenly a man lugging a turned out to be a camera, and a sprawling leave," or "Would you mind, etc.," the man set up his tripod and adjusted his camera on top of it. The three visitors on the club piazza looked in amazement while the camera was deliberately focused on them. "Now, look pleasant, please!" exclaimed

He rushed up the steps of the veranda and, grasping the first visitor, pulled him forward in his chair.

"Sit that way, please. Now, look pleas ant." The photographer rushed to another mem

ber of the group and whirled her head around to the right.

"Smile, please, smile!" he sternly or-While all of the party were still gasping

for breath the photographer rushed back to his camera and adjusted it again and then bid the group keep their eyes on the small brass tack in one corner of the camera and not move for three seconds. squeezed the bulb which he held in his hand and the picture was taken.

"All right, please," said the photographer pleasantly. "You may move now." The party arose and started around the veranda in the hopes of escaping any more photographers. But the man who had just taken their pictures pursued them. hailed one of the group, and, whipping out a notebook, said in a most businesslike tone;

"Your name and address, please; also address of the other two members of your party.

"I do not see why I should give you my name and address," answered the visitor. "O," replied the photographer, "to be sure. Then I will mail you proofs of the pictures, showing you and your party on the spacious veranda of the clubhouse The membership of this club is select and to be seen in a picture sitting on the veranda of the clubbouse in the easy fashion in which I arranged you people would be proof to everybody who knows anything about this celebrated resort-and everybody, of course, does-that you were received by the most prominent social people here and were yourselves

"Thank you, no," said the visitor. heard afterwards that he would receive the proofs of the picture just the same, his name and address being copied from hotel register. The photographer, who made a business of haunting the clubhouse result a prolonged period of unfavorable and photographing everybody caught siving on the verandas, makes a good income from the sale of pictures to people whose sense of vanity is tickled by the idea of being pictured lolling comfortably on the porch of the exclusive club. Besides this people who give their names and addresses to the photographer find out after get home that they have subscribed for the pictures and are expected to send \$5 or \$10 without delay to the photographer back at the resort.

Keep your system in perfect order and you will have health, even in the most Prickly Ash Bitters will insure vigor and

Registration Ends Today.

KANSAS CITY, July 26.—A special to the Star from El Reno, Okl., says: When El Reno awoke this morning it gave thanks that this was the last day of the registration for homesteaders. For sixteen d yathe town has been running at high pre-sure, that this was the last day of the registration for homesteaders. For sixteen d ya
the town has been running at hish bre sure,
and it is estimated that fully 150 000 straners have been accommodated here in t at
time. The crowd is gradually dwid d is
away. Registration will close promptly at
6 o'clock this evening, in accordance with
President McKinley's proclamation. The
total registration for fifteen days for both
the El Reno and Lawton districts is left. 66
It is now estimated that the grand o'nl
at the close tonight will be about 170.6 0.
The indications at Fort Sill this forenoon
are that today will see less than 1.000 pplications filed at the land office booths
there. The entire cherical force will bave
tonight for El Reno for the drawing. there. The entire clerical force will tonight for El Reno for the drawing

Pleads Innocent Purchaser.

ST PAUL, July 26.—A Helena, Mont., special says, Senator W. A. Clark has special says. Senator W. A. C. filed in the United States court filed in the United States court at Butte his answer to the suit brought by the government to vitiate his title to about 15,000 acres of timber land in western Montana on the ground that the lands were secured from the government through a gigantic swindle and in connection with which the federal grand jury returned by indictments. Clark, in brief, avers that he is an innocent purchaser and as such must be protected. The lands are valued at 1000. We vote best way and be heap should lose heart. It is those who have protected. The lands are valued at \$500,000.

it most and have in it the largest measure of faith. It is upon these, too, that its best gifts are always bestowed." Every Intelligent Farmer Who Wants

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ROTHENBERG & SCHLOSS

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to make a success of his business must keep up with the procession by constantly familiarizing himself with the most modern methods and improved processes in every department of agriculture. The average farmer, however, cannot take all the technical periodicals devoted to one thing only-such as poultry, live stock, the orchard, the dairy, the sugar beet, etc .- nor would he have the time to go through them if he had the means to do so. What he wants is

big triped, appeared in front of the veranda. Without so much as a "By your A Live Up-to-date Farm Paper

that covers all the ground in a thorough yet concise manner, that keeps him in touch with the best thought of experts in all these departments, but at the same time relieves him of details which do not particularly affect him. He wants a paper that is not only instructive to himself, but also entertaining and useful to his wife and his children. When he realizes this it will be found

Takes the Twentieth Century Farmer

because it best fills the demand by satisfying all these wants. It is particularly prepared for the farmers of the great middle west and treats of conditions and problems that confront them from day to day on the field, in the orchard, in the cattle pen, stable and barnyard. The best and most experienced writers contribute to its columns, which are also illustrated by beautiful halftone reproductions of

Original Photographic Art Studies

made by its special artist, who visits the best stock farms for the purpose of getting fine animals before the camera and takes in the field work at the seasonable periods. This paper in fact has set the pace for photographic illustrations of agricultural subjects. What has been accomplished during the past year in making the Farmer valuable and attractive is merely an assurance of still better things in future numbers. The progressive farmer

Cannot Afford to Be Without It

and will not only make sure that his name is kept on the subscription list, but also exerts himself to get his neighbors to avail themselves of its benefits by becoming subscribers too. The subscription price is one dollar a year. Sample copies on application to The Twentieth Century Farmer, Omaha.



"HE THAT WORKS EASILY, WORKS SUCCESSFULLY." CLEAN HOUSE WITH

SAPOLIO