Fritten for THE FARMERS' ALLIANCE.

The Song of the Cob. B ALLIANCE:-The enclosed poem is born of five year's experience. With coal from \$6.50 to \$10 a ton, and corn never once In that time selling at living prices (at one time as low as 8 ets. per bushell farmers are ged to depend on cols for fuel; and this ar even cobe have been scarce. The women Mebraska demand that the coal mines be worked in the interest of the people. Very respectfully.

July 31, 1891. Stoddard, Neb.

Fish fingers missbapen and rough, Awoman stood in unwomanly dress mng cobs into a stove.

Poke! poke! poke! Betwixt a shrick and a sob In a delerous voice no chaff could choke the sang the song of the cob. Stoff! stuff! stuff! To make the morning's coffee hot, Poke! poke! poke!

When the ten is in the pot. To time for a healthful breath, No time to turn around; Till I wonder if this is life or death, Or only eleep profound. Poke! poke! poke!

Till the brain begins to swim. Poke! poke! poke! Till the eyes are scorched and dim. es and cookies and bread. Till into the oven I stare and ask If I am among the dead. Am I dend and gone to hell Where an everlasting fire

her to that extent.

If this government was not a republic

where every citizen is a sovereign vo-

ter and a part of the general govern-

South American republics, whose gov-

ernment changes at nearly every

change of the moon, we could see some

people," and the more it is discussed from a single standard gold basis stand

point the more popular will be the now almost universal demand for free and

unlimited coinage of silver, and sufficient treasury notes of small denomi-

nation to take the place of all bonds

and substitute all toreign loans, so that

our entire people may be truly free in every sense of the term, and independent,

fisancially, of all nations of the earth.

which would be greatly deplored by every true American citizen, regard-

ess of party, business or profession. Speaking of silver coinage and silver

How long the government can con-

the most valuable basis for money-an

insult and a high crime against this na-

tion any attempt to depreciate the value

of our population from immigration, say nothing of our natural increase, over

pher to foretell the result if the general

government does not in the near future

create more money and devise some

legitimate and honorable means of plac-

ng it in the hands of the people without

per month, as thousands of our most worthy, industrious and frugal citizens

are now doing, as a direct result of Carnegie's standard theory. Trusting that Mr. Carnegie, with all

his "remarkable" ability, may not be able to make many converts to his "single standard" "gold basis" fallacy,

Thine for finance reform, GEORGE W. BREWSTER.

That surpassingly smart Washing-

ton man who swore that he was worth

between "five and six thousand dol-

we remain, as ever.

of any of our currency.

Brother Carnegie says:

nillions as an exchange medium

Must be kept alive with cobs Just to glut the devil's ire? la the chaff, and dirt, and beat, Retribution for some crime That o'erwhelmed my unwary soul On the mazy shores of time? Why do I talk of a soul,

That phantom of my youth, That vanished for want of a leisure hour To feed it on love and truth? O, love, dear love and truth, Are ye but things that seem. And is only the body left to grope In the terrors of a dream? Poke! poke! poke!

From weary chime to chime, With an unremitting and steady stroke As prisoners give for crime. Wash, and iron, and bake. Till the back is bent and brain benumbed, And the neart is like to break.

Poke! poke! poke! In the summer glare and beat. Pose! poke! poke! Ween the wind blows snow and sleet. Pok+1 poke! poke! When comes the breath of spring

To twit me of that glorious time

When I was a gladsome thing.

O, for one leisure hour And a walk beneath the trees, Where I might breathe the violets breath, And bear the birds and bees; For only one short hour To feel se I used to feel Before I knew the cohe that are used In getting a single meal.

With fingers misshapen and rough, As if a deamon strove, woman stood in unwomanly dress tuffing cobs into a stove. . Poke! poke! poke!

In a dolorous voice no chaff could choke: In the hurry, worry, and beat and smoke, Ehe sang the song of the cob.

th the fac and World Herald papers do not want able articles from country and enable the people to pay all the debts they owe to foreign capiboring men on economic questions.-EDITOR ALLIANCE.

Money," and you seem pleased to call it the best able to redeem, and furnishes "remarkable." The ability displayed in the article is of a high order, but it or people under the sun. is considered remarkably unsound by thousands of voters in the western and any government will soon exhaust its middle states, regardless of party, and anything but what has intrinsic value I trust you will allow your readers to as metal all the world over." If this is this most important question from a re- that United States bonds, with comparpublican who sees the money question

through different glasses.

Mr. Carnegie's millions of money in and why is national bank money, also of try was acceptable, and to the extent of the same government, with no specie increasing the home market for our pro- reserve for either, worth as much as any duce we fully appreciate the gentleman. gold dollar of any nation on earth? And But when he proposes to educate the toiling millions of this country to believe that "money is the basis of all values," and "that gold should be that basis or standard of value," he has commenced thirty years too late, as the powerful gold speculators tried the same thing many years ago when the four hundred and fifty million dollars of greenback treasury notes were issued without a dollar of gold as a basis, which, together with three billion dol- nation, of inexhaustible agricultural, lars worth of bonds, also without a gold or metal basis of any kind, saved the nation in time of its greatest peril. The and every true and loyal American is money as worthless rags, but those same rags made thousands of them immensely rich, because it had a much better basis than gold-the untold agricultural, mineral, commercial and manufacturing wealth of the west, the most

States got all they wanted of a "gold standard" of value when cur only money was robbed of two-thirds its value by the gold gamblers and speculators of Wall Street, who ought to have been multitude must be amplified. Wall Street, who ought to have been multitude must be employed, fed and hung to the first lamp post, as traitors educated, and with the present depresto their country, and their gold confission in business and want of money
among the masses, with which to employ labor, it does not require a philoswe got al. we wanted of a "gold pher to foretall the result of the

We got al. we wanted of a "gold standard" of value when these three billion dollars of bonds were sold for thirty and forty cents on the dollar, bought with treasury notes depreciated being compelled to pay 10 per cent per by the same "standard of value," by the annum and as high as 2 and 5 per cent same gang of thieves. These same bonds, by law "payable in lawful money of the Unietd State," which was then gold, silver and paper, was by the me "gold standard" gang, so amended and changed as to be paid, both principal and interest, in gold.

ther Carnegie does not tell your readers that he was paid thirteen dollars per month for his services while setting the battles to save the life and unity of the greatest and best nation on arth, in money only worth thirty-five ets on the dollar, all on account of lars" stands a good chance to live in old standard" of value, but thou- the penitentiary between five and six made of battle scarred veterans can, thousand years for his little joke.

and still feel like killing a man who SIGNIFICANCE OF THE NEW POwill talk or write such nonsease.

Most intelligent citizens of all parties in the United States now consider LITICAL PARTY.

Gov. Sylvester Pennoyer, of Oregon, in money simply a medium of exchange, representative of value, not value itself; the North American Review for representative of value, not value alone and that the general government alone should "coin all the money and fix the August. value thereof," not that some gold or silver owners or brokers should fix its Is there a necessity for a new political value; also that the money should be

gold, silver and paper of the same val-ue, to suit the different commercial or trade interests, and all metalic currency should contain sufficient alloy to pre-The answer is plain, and it will spring Nationalism. vent it being recast for manufacturing new party if there be flagrant govern- me I'm getting to be a pretty good na- farmer Harrison, from Tippecanoe, was Foreign Electrical Talent in Amera rurposes, jewelry or any other purpose than money. Most people have lost all faith in a specie basis policy, and believe they night as well use the basis as the issue. and that the government should create records answer. enough money to do the entire business of the country without being compelled to borrow of foreign capitalists. We

might as well pay the interest to our MANDED. own government, on the same security, as to pay it to the bankers in Europe. It is upon the trend of its figancial nent in your propaganda. It is an undisputed fact that a large policy mainly that the new party repart—say at least two-thirds of all the sponds to the necessity of the times and policy mainly that the new party rein use in this country by complies with the demands of the peorailroads and other corporate interests, as well as many large farm mortgage loans—are held in England, France or Germany. It is now time the United

should be entirely unassailable both as alism, but are not prepared for this States substituted money for her bonds. to its justice and its practical operation and coined sufficient money to pay off all toese enormous loans, and let the terest for it to the government, instead of compelling the people and the government to longer pay interest to Europe and be owned and controlled by for the enrichment of that extends the government is wide. It necessarily presupposes the complete nationalization of industry, and can only be fully introduced when that has been accomplished. fiscal system of the government is widefor the enrichment of the few which is

the legitimate result of its operations. In the first place, therefore, the cur-rency which is proposed to be issued should be based upon a perfectly secure and imperishable foundation, and should ment, or was such as some of our sister be a lega'-tender for all debts, public good sense in having our money of such material that it could be sold for its commercial value in any country to or any other security than the improved products. Now these people are already which we might flee for refuge, but such not being the case silver and paper is and should be the money of the country, which the government, in the interest of the whole peotablish and continuously to maintain the poor as well as rich, cannot justly There can be no better or safer se-Mr. Carnegie very truly says: "The do. There can be no better or safer semust rest upon the political organization. money question is the most pressing of curry for a government loan than the As political copartners they are equals. all questions now before the American real property of the nation. If the loan is anybody so exceedingly simple as to

good as a government bond or gold and AN OREGON EXPERIMENT. The main argument against such a by stubborn facts. The state of Oregon has now more than \$2,000,000 of school Our power to redeem is unlimited, but unless our government uses her con-stitutional rights to "coin money and farm property of the state. The amount fix the value thereof" sufficient to re-relieve the constantly increasing de-mand for money for the last twenty years, the greater part of all our most valuable property and securities will consisting of the governor, secretary of soon be owned by foreign capitalists, state, and state treasurer, and is without any cost to the state other than that will be the work and will of a people involved in the salaries paid to the mem-bers of the board for their entire official duties, amounting in all to \$3,800 per annum. The applicant pays for the ex-amination of the title to his land and tinue issuing four and one-half millions more of these notes or coins every its appraisement by the attorney of the board for the county in which the land betwixt a shrick and a sob,
na dolorous voice no char could choke:
In the hurry, worry, and heat and smoke,
he sang the song of the cob.

"The A B C of Money."

[The following article was rejected by the both the Big and World-Herald Those]

Those

| More of these notes of coins every month and keep them equal to gold no body can tell." From present indications it does not require a prophet to predict that it will be as long as sixty millions of people of the United States collivate the soil, operate mines, factories, railroads and employ laber or purchase the products of labor, and unpurchase the products of labor and unpurchase the products of labor, and unpurchase th

ONAHA, Neb., June 25, 1891.

EDITOR ONAHA BEE:—I see you have reproduced six columns of Andrew gold and silver than any other nation evolved by the proposed financial system. Carnegie's paper on "The A B C of on earth, which makes our government is: How shall the money be procured by the government for making such a exchange medium—of any government provided would to a great extent de-

He also says: "But then, remember, credit if it continues to issue as money If the loans were made to the people hear a few words on the other side of true how does he account for the fact not exceeding four per cent, and the currency for such loans, as well as gold atively no intrinsic value, with no metal worth a premium of twentyfour and twenty-six cents on the dollar. earing interest not exceeding three the employment of labor in this counno value beyond the "fiat" of the govbe that the issuance of not nearly so
erament, based upon a "fiat" bond of much currency would be required as be that the issuance of not nearly so would be if no such provision for funding it was made, inasmuch as investors in government securities would largely furnish the required amount. If a polwhy is it that the greenback treasury note, with no value beyond the stamp icy be adopted of changing the currency into bonds, and the bonds into currency, upon it, is worth as much as gold in any ountry, and the credit of this nation is at the will of the holder of either, under better than any civilized nation on the necessary restrictions, the whole The same answer, and only anfinancial business of the country could be adjusted to the proposed swer to this problem is a solution to the great question of the value of any monwithout any greater enlargement of the volume of the currency of the country ey other than gold, which is and always has been scarce and high. The plain than its actual business requirements reason why any promise to pay of the demand. Such a policy would place demand. Such a policy would place United States or anything she may create as money is good, is because every dollar of resources of this entire the currency of the nation upon the safest foundation possible, and would entirely preclude those extremes of con traction and expansion so hurtful to mineral and manufacturing wealth, and business interests; for, if there should all the labor and products of labor is the | be in circulation more money than could basis of all promises of the government, be advantageously used it would seek investment in government securities, hard money men then denounced that ready and willing to take it at one hun-dred cents on the dollar for his produce, for more, the bonds would be changed into currency. abor or anything the world wishes for its redemption, and should resent as an

The plain alternative presented to ti.at class, and to the whole people of this country, so far as our financial sys-Another strong argument in favor of tem is concerned, is reform or revolu-a largely increased volume of money by tion. And whatsoever party shall bring tion. And whatsoever party shall bring prolific nation on earth at its back as a the government, is the immense increase about the needed reformation in the fiscal policy of the government will cure the favor of a just God and the support of a grateful people.

> When the cities, as a rule, own and manage their water-works, lighting only by his gifts. plants, street railways, ferries and telcphones, as they might very speedily do in fact, your whole talk is a gross pla be placed outside of crushing and de made me a nationalist, and I confess grading competitive conditions, and te in a considerably better position as regards general conditions of service than employes of private corporations or in-dividuals. This object lesson would have its effect in strengthening the de-mand for better conditions and levelling up wages, and giving a greater impulse to the movement for public control. The result would be that many businesses now considered entirely beyond the scope of public management would be undertaken by municipal bodies, and the status of the employes materially improved.-Journal of Knights of Labor.

Poor Fellow. He- "Life with me has been a failTalks on Nationalism

By Edward Bellamy in The New Nation. Mr. Smith who has joined the Nationalists, meets a Favorably Disposed Person, who. however, would like to have less said about making everybody economically band. The Hebrews held their year

party in our government at this time? seem to be favorably disposed toward and other producers held a session of

simultaneously from the lips of every F. D. P.-Yes, I don't mind saying Buren administration, and the result honest man. There is a necessity for a that I am. In fact, between you and was, Van was laid on the shelf, while mental abuses which are unnoticed and tionalist. The truth is, according to the triumphantly elected. And now again, popular demands for justice which are way things are going now, I don't see in 1892, the signs are rotten ripe for a unheeded by the existing political or- anything, unless it be nationalism, that repetition of those stirring times, when ganizations. Are there such? Let the is going to save the country from ever lasting smash within ten years. There A CHANGE IN THE FISCAL SYSTEM DE- though, and I think you would be wise extravagance, wire-pulling. bossism young Montenegrin, Nikola Tesla, con-S .- What is that?

F. D. P .- Your doctrine of economical equality, that is to say, that the proviple, and it is therefore of the most ur. sion made for all is to be the same. A gent importance that such a policy good many, like myself, are quite ready to go in for the other features of nation-

The demand for an entire change in the sure you never heard a nationalist advocate the application of that principle F. D. P.-But why should it be intro-

duced at all? Why should it be regarded as a necessary feature of nationalism? S .- It ought not to be very difficult to make you see that. What is it we nationalists propose? We ask a republican nation to substitute for the present and private. Such a basis can only be individualistic industrial system, a natablish and continuously to maintain the soil proposed industrial partnership, which must rest upon the political organization. is placed upon such property at one half suppose that these equal political part-or one third of its real value, it is as secure as the government itself, and the currency based upon such a loan is as Look at it another way. Nationalism good as a government bond or gold and proposes that the national organization. of the national political organization is policy is based upon its supposed im one of absolute equality; is it likely that practicability. This has been answered in extending the national organization its fundamental principle will be abandoned? Why, my dear fellow, there money loaned out upon the improved are many ideas on the possible developments of nationalism, on which there is

> who are already political equals.
>
> F. D. P.—That is a point I had not thought of. You claim, then, that quite apart from any questions whether or not, philosophically speaking, economical equality ought to be the law of nationalism, it must be so, owing to the pre-

our generous government coins sof- it may be a blessing to the farmers of conditions, instead of from the point of ficient to do the entire business of the country by demonstrating the view of the nationalists, which is Amer-country and enable the people to pay entire feasibility of loaning government ican and suggested by American condimoney upon the improved real property tions. According to the socialists, the coming order will be chiefly a result of social and industrial evolution as dis-The next question of importance tinguished from political and national evolution. Granting the accuracy of this view, the coming social order might by the government for making such a conceivably be variously organized as loan? If required, it could and would be procured as it was in order to carry ists, however, declare that the evolution late war, but the amount to be of the new order, while affected and promoted by social and industrial evopend upon the exact conditions of the lution, is primarily a political and natiscal policy to be established. is logically the establishment of a politupon impr. ved real property at a rate ical republic, with the subsequent ex-not exceeding four per cent, and the tension to the industrial organization of society of the principle of equality aland silver, was changeable at will into ready established in the political organgovernment treasury notes or bonds, ization. A new industrial system emerging directly from an aristocratiper cent, the result would undoubtedly cal or monarchial society might recognize and perpetuate inequalities; but es tablished by a republican nation, it must be found d upon the principle of equal-Therefore, whether or not economical equality should characterize socialistic regimes which night be established in Europe, it must inevitably be the foundation of any new industrial system established in America. In one sense, system the goal of nationalism; it would not make a particle of difference about the But in another and mersimportant respect, it would be suicidal, for it would kill the soul of nationalism. which is the principle of human brotherhood,-the enthusiasm of humanity.

what he produces, even though it means ery out that we will interfere with the that some have more than others? Jus-

tice before generosity. S .- By all means, justice. - There never yet was any generosity, for no man ever gave or could give all he owed. We owe all we are. Has not a mother right in the strength of her son, and if a mother, then has not the great mother-humanity-an infinitely greater right? It makes me laugh to hear a that he has a right to all he produces, and to notning more. If that be so, he has no right to himself. His phrase shuts his own mouth. The only way a man may excuse himself for enjoying this earth and his own-life is by the perpetual tribute of a social duty measured

if organized labor threw its voting giarism from the New Testament. But I power into the scale and co-operated am pretty conservative; in fact, it is my heartily with the nationalists, a vast conservatism which, in face of the presarmy of working men and women would ent ruinous tendency of business, has made me a nationalist, and I confess equality is rather startling.

than the idea of the right of all men to an equal share in political administration was to your great grandfather. The world's precedents, save here and there a brief and ill-starred experiment, had been of kingly right and aristocratic leadership. Now, suddenly it was pro-posed that men should share power qually,-the sage with the ploughman. the wealthiest with the poorest, the warrior with the cripple, the lord of a thousand acres with the humblest tenant. Your present scare ought to enable you to sympathize with your anure." She—"You must bave had and wasted some opportunity." "No: I would wish it retracted? Even as you have spent half my life raising whisk-ers to conceal my youth, and the other half dyeing them to conceal my age."

—Munsey's Weekiy.

Would wish it terrors of your ancestors, in presence of the spectre of political equality, will our children laugh at the alarm of their parents at the advent of equality in the social sphere.

THE YEAR OF JUBILEE.

It Is Coming as It Came Before in the Year 1840. Indeed, the year of jubilee is at

of jubilee every fifty years, but in this case it seems to be fifty-two years from The Rapidity of Electricity -- Foreign SMITH - Why don't you join us? You 1840 to 1892. In 1840, the farmers jubilee, as a protest against the wirepulling and extravagance of the Van log cabins arose like mushrooms in the night, and hard eider flowed like water. In 1840, the great issue was is one thing I'm not quite ready for between the common people and the College in New York, when the brilliant if you did not make it quite so promi- and general corruption of those in ducted his extraordinary experiments power. In 1892, there is, added to with alternating currents of high freon the common people, any nation prised the very flower of the electrical paternalized corporate oppression upever witnessed. S.—Of course not. Nobody is. I am hosts of freemen to victory, so now a may be said that Mr. Tesla showed must be called from the plow, like how incandescent lighting could be real farmer with hayseed in his hair Washington and Putman in the Amer- done with lamps connected by only ican revolution, and Cincinnatus, the one wire, and even without any con-Roman farmer, to hold aloft the ban- nection at all, so that if, for example ner of "equal rights to all and special privileges to none."

The women, in their constant attendance upon the meetings of the experiments were neccessarily conduct-Alliance throughout the length and the breadth of the land, are becoming well informed and well drilled to take confines of eastern Europe wieldtheir places in the ranks of this great ed these army of veteran tollers who, like the glass tubes that lit Athenian hosts under Miltiades on the brilliantly in some positions with plains of Marathon, will drive the the flashing splendor of big fireflies or corporate combines of Persian pluto- summer lighting, and as quickly fadcracy from the shores of Columbia's ed out on being held beyond the

found great seiges and contests, like glow just like a necromancing philosofought either in defense of country or ments by Tesla carry us many leagin the interest of conquest-yet, when considered in the light of the enormity of the conditions to be removed. hitherto merely political, be extended and in the far reaching benefits that over the industrial field. The principle will accrue to the living and to posterity to come, this great contest of ballots in 1892, if successful, will skill as an electrician. What added, eclipse the grandest victories found within the cycles of antiquity.

And, now, what can be said to arouse eagle-eyed youth held his audience the enslaved of America from their spell-bound for more than three despondent indifference to the impending woes that await them? We shrink English of the utmost clearness and with horror from the cruel edict of a purity, expressing the very latest and tion, there is not the slightest. That Pharoah to kill all male infants lest most subtle ideas in electrical science the Israelites should overrun nis kingdom? Was that more cruel than that their meaning just as sharply as the infants of to-day should be doomed. though they had been one of those the infants of to-day should be doomed, in their youth, to a life of servitude. in which their tender bodies are to be worn out to enrich the office of manufacturing barons? As Moses raised up the brazen serpent in the wilderness, that all who were bitten by poisonous reptiles might look to it and be saved, so men brave and true, raise up the who is destined to open up new fields demands of the oppressed everywhere, of electrical industry and bids fair to that all may look to them as a sure stand with Morse and Edison and avenue of escape from plutocracy's Bell.

evils. Maria Theresa, Empress of Bohemia and Hungary, after being banished from the capital of Vienna, fled to her Hungarian subjects, and holding up her infant son before them, said: source than in your fidelity, in your courage and my own constancy, I commit to your care the son of your king who has no other safety than your protection." With one voice they exclaimed: "We will die for our Queen." land, born and unborn, who must inherit the evils you complain of unless they are removed, are committed to

Will you put on the armor now? May says the Philadelphia Record. The God help.-E. H. Belden in National current was transmitted in Montreal, Economist. Be Alliancemen or Quit. There are a few men in cur state, berhaps one or two in each county, and sometimes more, who have never been in sympathy with the Alliance and have never considered it other than a kind of agricultural society, treal until it returned to the receiver who although some of them are taking there would be no objection to dropping advantage of the organization to light 1-20th of a second had elapsed; but the talk about economical equality as into petty offices; they are always the conditions were not as good as whining that we should not get into they might have been. The rapid politics. These men have never been ity with which the current travels in harmony with the reform move- over short wires with no delay indiment which we had, but are in the cated unlimited possibilities in the way of everything like progress in the direction of practical tests. Prof. order, and whenever an effort is made Marks, of the Edison Electric Light order, and whenever an effort is made to take a positive stand upon the Alli- Company, is authority for the asser-F. D. P.—That's very pretty; but is it to take a positive stand upon the Allifair? After all, should a man not have ance platform, they will immediately Democratic party. To this we say either be an Allianceman or get out of the way. You are not only a reproach to the organization, but you are in the way of this movement, which is destined to reform this country, from the power of money to oppress. The Alliance must be a unit, and the man who will not go with the majority of his man who is himself a product, claiming Alliance brethren, and having opposed of all physical motion, has attempted a movement in the sub-Alliance, and to calculate the quantity of energy will not abide by its decision, is unworthy of the name of Allianceman, and should be put out of the ranks. There are sub-Alliances in Georgia. who are not afraid to turn such ren-

egades out of their ranks, and in required to raise the weight of a ton F. D. P.-I will not say you are not many cases these men have a number to a height of 10,700 feet, or converseright. I know in my heartthat you are: of friends who will not follow them in ly, that required to lift 10,700 tons anything, but who like the too well to the height of one foot. Similarly to turn them out of the order. Whenever this is the case, and it becomes known to the country Alliance, the lodge should be suspended by the county Alliance until it purifies its ranks. We can better afford to fight S.-You must remember that it is no a thousand on the outside of the order, more and probably less startling to you. than one on the inside; and yet these emmissaries are the people's enemies. and are in our ranks, the brethren are afraid to turn them out because they hate to offend a few good people. believe that the Alliance is the only hope for this country, and this hope should not be crushed in any such way. Purify your ranks; have either Alliancemen or none, -Southern Alliance stroyed. This fine adjustment of Farmer.

The Thedford, Neb., Tribune: The people are no longer interested in party for party success or party supremacy, but they are more directly interested in that party, without regard to its name, that is advocating measures that are favorable to their own material

SCIENCE AND PROGRESS.

INTERESTING DISCOVERIES BY MEN OF SCIENCE.

Electrical Talent in America--A Paper Hotel -- Iridescent Glass--Scientific Notes.

The manner in which this country draws to itself the most progressive spirit in electrical work was strikingly shown a week or two ago at Columbia all these, the most gigantic system of quency, before an audience that com-Indeed. all signs engineering profession in this country. point to more than a repetition of the The occasion was one that will never campaign of . Tippecanoe and Tyler be forgotten by any of those who Then a real farmer lead the participated. Briefly summed up, it a lamp were simply carried into a room or merely laid on a table it would at once light up. Many of these ed in darkness, and it was a fascinatng, uncanny spectacle as this tall, ispare mountaineer from the utmost lamps and sphere of magic influence—the lecturer Among the records of history are all the while seen only by their fitful the seige at the gates of Thermopylæ, pher of the middle ages standing over the battles of Hastings and Waterloo his boiling caldron. These experiues beyond the point reached amid immense applauses by Prof. Hertz in Germany, and Dr. Lodge, in England, and yet are the unaided work of a young man who came to America only four or five years ago, content to earn a few dollars weekly by his

moreover, to the interest of this unique occasion was the fact that this hours and spoke throughout in in words and phrases that cut out keen-edged fighting knives for which there are more than one hundred descriptive words in Mr. Tesla's native tongue. These experiments by Tesla are now creating the greatest excitement in electrical circles in Europe. and prove that this country has de veloped another transplanted genius,

The Rapidity of Electricity.

Philadelphia scientists are making the earth. arrangements to determine how fast the electric current travels. An ex-"Abandoned by my friends, persecuted periment will be made from the by my enemies, attacked by my near- Franklin Institute, over the Atlantic est relations, and having no other re- cable, to Liverpool and return. A recent test would seem to show that electricity is slow compared with light, being able to get along at something like 400,000 miles a minute, while light has a 1,000,000 mile a minute American freemen, the infants of our gait. But scientists are not satisfied that electricity is the slower of the two. The most recent experiment your care. Will you act in this crisis? was tried at McGill College, Montreal, was transferred to the cable at Newfoundland cable station by means of Thomson's mirror galvanometer, sent returned to Montreal by the same The distance traversed, partly by overhead wire and partly ov cable, was 8,000 miles. From the time the current left the key in Monin the same office just 1 second and tion that if the globe was encircled with a continuous cable a current would travel the entire distance in a trifle over 3 seconds. At this rate a current would travel to the sun, covering the entire distance of 96,000,000 miles, in three and a half minutes.

Ether. Mr. S. Totver Preston, in assuming that the ether is the ultimate source contained in a cubic foot of space filled with ether, and arrives at the conclusion that it amounts to 10,700 foot tons, that is to say, the energy the energy stored in 21/2 cubic feet o ether is equivalent to that of a railway train weighing 300 tons, and running at a speed of 60 miles per hour. In arriving at this result he only assumes that the particles of ether move with the velocity of light, and that the density of the ether may be taken as one five-millionth of the density of the atmosphere. Given these conditions, which are consistent with what we al ready know of the ether, that medium must exert a pressure on matter immersed in it of 500 tons per square inch. It is only by the perfect balance of this enormous pressure all around that matter is not immediate'y depressure conceals the etheric energy from the evidence of our senses; but when the balance of pressure is slightly upset we are able to observe the perturbation, as in the lightning flash and thunderstroke, or in the ignition of an explosive.

Iridescent Glass. Examples of ancient Cyprian glass-

ware are noted for their gorgeous iridescence, surpassing in brilliancy of color anything ever produced by artificial means. So far as is at present known, this effect can be produced only by the corrosive action of the air and moisture of the soil in which these objects have been buried for centuries. A microscopical examination of this glass shows that the surface is covered with exceedingly thintransparent films formed by matter dissolved from the glass. The body of the glass is pitted over its entire surface with minute cavities, which are circular, elliptical, or oblong in outline, and either spherical, ellipsoidal, or cylindrical in respect to their concarity, and the films conform to the piced surface of the glass. These films, of which there are many superposed, are so thin as to float in air like down when detached. They decompose the light by interference due to reflections from the front and rear surfaces of the film, and give to-witthe gorgeous play of color.-Iron.

Glow Lamp Fila ments.

The filament of the electric glow lamp deteriorates after a time, thus causing a diminution of the candle power and finally its displacement. To remedy this, two processes, both hailing from Germany, have been invented. The first consists in the use of chromium, which is deposited onthe carbon filament either by electrolysis or by a chemical method. The inventor claims that the melting point of the chromium is so high as to resist the temperature of the electrical current and to greatly increase the life of the filament. The other inventor employs the nitrides of silicon or boron for the same purpose. The filament is heated to incandescence in an atmosphere of volatile silicon or boron compounds and volatile nitrogen compounds, when the heat reduces them and forms solid nitrides of silicon, which are found to be deposited with great uniformity over the surface of the filament .- Iron.

The Population of a Cheese. M. Adametz has lately made some researches upon the microscopic organisms that inhabit cheese. From an examination of Emmenthal, a soft variety of Gruyere cheese, he has obtained the following results:-In each gramme of the cheese, when fresh from 90,000 to 140,000 microbes are found. This number increases with time. Thus, a cheese 71 days old contains 800,000bacteria pergramme. The population of a soft cheese 25 days' old and much denser than the preceding is 1,200,000 microbes per gramme. But the population of acheese is not everywhere distributed the same in it. The centre is but moderately inhabited with respect to the exterior portion, The population of a soft cheese, pear the periphery, is from 3,600,000to 5,600, 000 microbes. According to the mean of these two figures there are as many living organisms in 360 grammes of

A Paper Hotel.

There seems to be practically no limitation to the uses which paper can be and is applied. To the long list of articles intended for personal use and in the smaller details of construction in rolling stock, such as wheels, axels, &c., there has been added a more extensive application, of paper to the needs of everyday life by the building of an hotel constructed of this material. This novel residence, which has just been finished, and is situated in Hamburg, has been made entirely of paper boards which, it is said, are of the hardness of wood, but possess an advantage over the latter material in that they are fireproof, this desirable across to the station at Liverpool, and end being effected by impregnation with certain chemical solutions .-Iron.

Scientific Notes.

M. Mascart, one of the eminent French electricians of the time, says that the use of the magnetic needle in tracing the underground geology, or, in other words, the past geography of a country, is one of those triumphs of science which are almost tantamount to divination.

Plans proposed for irrigation both in Upper and Lower Egypt during the period of low Nile include the building of a high barrage across the river at the first cataract. Great opposition has been excited against this poposition, as it involves the sub-mersion of the beautiful island of Philoe and its magnificent monuments for several months each year.

There was recently exhibited in Dublin a new burner for light-house use, possessing twice the illuminating power of the largest burners now employed. It is calculated that this new burner, in connection with a specially devised system of lenses, will transmit a light equal to about eight millions of candles, which far exceeds the most powerful light at present used.

A curious phenomenon is reported from Jewett City, Conn. George Rood. was recently struck by a thunderbolt ad bandly burnel, and suffers intensely still. His whole body is so changed with electricity that when he puts his hands together they stick, and only by violent rubbing can they be separated. If his feet touch it is the same, The severe burns are beginning to heal and his appetite is good, but he can not stand up.

It is evident that electric power is to be the motive power of the futureincities. New York city is constantly warring upon elevated system, not alone because of the inadequacy, but because of its noise and dust, and disturbance ofresidents. Edison and others argue for an arcade electric road under the principal streets, It will come to this within a few years. Despite its irregularities, the electric motor is the motor of the future. The history of steam as a power shows no such advantage as electricity.