NEW ADVERTISEMENTS.

BEATS COAL AND GAS.

Electricity Likely to be the Fuel of the Future Not Only in Street Cars but in Homes.

THE WALLS WILL BE RADIATORS

And Perhaps Ceilings Can be Made to Give Out All the Light Needed for Ordinary Purposes.

FURNACES MAY USE THE CURRENT.

Late Developments in the Scientific World That Are Both

Useful and Interesting.

PREPARED FOR THE DISPATCH. Now and again one bears of electric heating in a vague kind of way that would hardly lead anybody to suppose practical that the electric beating apparatus is already in quite general use, and that several companies have been termed for its introduction. One of the earlier torms of electric heaters, which was specially designed for street car use, is not unlike an ordinary radiator, and has also been given a shape resembling that of the familiar metal foot warmer.

The rapid increase in the number of elecfield, and a new heater has been brought out, which for simplicity and for economy of space seems hard to excel. It consists of a narrow strip of ribbon of asbestos, inclosed in sheet iron, about three inches in from one end of the car to the other, and is protected by a wire screen. A second strip the same dimensions is attached to the first us a kind of compressing plate, and the wires are embedded in the asbestos. These strips are given a zig-zag form, so as to in-crease the length of radiating surface exposed in a given area. The current being turned on, the wires, by means of the resistance they are purposely made to offer to the current, become very hot, and this heat is radiated, therefore, steadily and equably throughout the car.

A more agreeable means of heating it would be hard to imagine. No space is taken up by the stove, nor are any of the seats rendered unpleasant by proximity to the beating apparatus. One part of a car is just as warm as the other, and by means of various methods of arranging the strips, the degree of best can be regulated to a nicety. There is no need to get the car ready for the approach of winter, nor to make any special arrangement whatever, other than the simple attachment of the atrips under the seats. All that is necessary when heat is wanted is that either the driver of the electric car or the conductor shall switch or turn on the current through the heating apparatus, and thus the same agency which propels the car and lights it also provides it with warmth.

The question which comes into one's mind on riding in one of the many electric cars now equipped in this excellent manner is, why something of the same kind cannot be rendered available or office or household use. The probability is that it soon will be. In speaking of electric car heating at a recent street railway meeting at Columbus, O., one of the members stated that he had a little heater in his house which the laundress at any time connected up with one of the neandescent lamp sockets, and by means of which she ironed all day, the iron getting only so hot and never any hotter. Cooking is very often done in this way also now, and with the general extension of lighting cir-cuits we may look for an enormous number of inventious in apparatus for using electric heat in the family. The change will go even further than this, for if heat can be brought into an office or a house through the agency of a small wire there is certainly no need to convert the cellar of every house into a miniature coal mine, with all the attendant nuisance of running a furnace or open fires and then getting rid of the ashes, or of filling it up with natural gas meters. It is quite within the bounds of possibility that at no distant day our heat will be liated gently for us from the wall paper, and light supplied to us from a luminescen

The Preservation of Timber. In the history of attempts at prolonging the life of timber some very curious expedients are met with. In 1836 Dr. Boucherie, a Prench chemist, tried to impregnate timthe tree and allowing the ascending sap to carry up a preserving solution. This, however, did not give satisfactory results, and in place o it a cap was supplied to the end os a newly-cut log, and the solution forced along the sap ducts by hydraulic pressure. Sulphate of copper was the chemical used, and when it was applied to newly felled timber it gave good results. Lime water has been tried, and also salt, but the effects have not been such as to encourage the repetition of the treatment. There repetition of the treatment. There is a strip of road in the Union Pacific Railroad, in Wyoming, where the sleepers do not decay at all. The agalysis of the soil shows that it contains sodium, potassium, chloride, calcium and iron, which act as preserving agents. aventor named Foreman brought out a process by which dry arsenic and corrosive sublimate were inserted in holes in sleepers, and covered with plugs. The materials besurface, when the cattle licked them and ores. The farmers rose in arms and lorced the railroad company to burn all the sleepers. One of the best of recently devised methods of preserving timber con-sists simply in soaking the timber in melted naphthaline for a period varying from 2 to 12 hours, depending upon the bulk of the piece. A temperature of 180° to 200° Fabrenheit is all that is required for the process, and is most easily obtained by placng steam pipes in the bottom of the tank which contains the material. Simple as the process is it possesses a still more valuable feature. It can be applied to green timber, thus obviating the necessity of a long and expensive process of seasoning. The naphthaline penetrates the pores of the wood, de-composing the albumenoid compounds and displacing both sap and water. It then becomes fixed and the whole substance is permeated with solid antiseptic of a permanent character. This process has for some time been employed in England, from which come excellent accounts or its effectiveness, out there seems no reason why it should not be adopted in this country, where the gigantic drain of recent years is telling on the timber supply, and where, at last, serious attention is being given to preservative pro-

Winter on the Street Railway.

A provident street rallway superintendent tells how upon the approach of winter he makes sure that his company's property is equal to all possibilities of rough weather and hard usage. Armed with a note book and pencil he goes over the entire line, not-ing all broken and impaired rails or fishplates and all places where the track has sunk and water and ice may soon cause trouble. In one place it is likely that a paying stone may be so high as to be in the way of the snow plough, and in other places the roadbed has been so laid that when frost comes it will hit the motor pan. These notes are given to the foreman and attended to in ue course. The supervision of the ove weather of strain guys that have been kept taut all summer, the resoldering of ears, the putting on of new ineu-lators, the painting of arms, etc.

must be got ready, and in overhauling the trucks a special eye must be kept on a wheel that has been worn a number of seasons and is getting light. To try to get more wear out of it is poor economy, as some morning, when it is full of frost and goes into a curve it may head and account of the cost of the other hand the power said to be possible to the cost of the when it is full of frost and goes into a curve it may break and create damage, the cost of which to the company will be greater than that of the equipment of the entire cars of the line with new wheels. Make a personal inspection of every brake chain and rod on the line with new wheels. Make a personal inspection of every brake chain and rod on the line with line inspection of every brake chain and rod on the line, and be sure that every link is strong. Gears and pinions must be taken off when they have worn down to a certain thickness, whether they look "like wearing a few days more" or not, and thus provision is made against a break which will ruin a gear that might have been good for a month or two. When all these precautions are taken, and the salt, coal and sand bius are filled, the superintendent feels that the blizzard has no particular terrors for him, and he can regard with complacency the worst that the weather bureau can do in the way of daily bulletins.

Give the Central a Chance. It is not generally borne in mind by the irate telephone subscriber, when complaining of bad service, that the telephone, more than any other electrical appliance in daily use, requires a certain knowledge, on the part of the user, of its construction, and the hardly lead anybody to suppose practical elementary principles of the production and results had been obtained. But the fact is ear. When we send a telegram or turn on the electric light, or call a message, no special knowledge of the means employed is necessary. We write out a message, hand it in and pay the charge, sud we know that a written copy will be handed out at the other end. With the electric light we turn a switch, and the light appears or disappears, as the case may be. According to the bye-word of the day, we press the button and the

company does the rest.
With the telephone it is different. Every tric street cars in our Northern latitudes man who uses the instrument becomes in a has given a stimulus to ingenuity in this certain sense a telephone operator, and in know something about the machine he is using, and how it works, and also about his own voice and ear. Some people stand away from the transmitter and waste the air other in the walls of the furnace. The metal vibrations they set up when speaking on the width, and one-quarter inch in thickness. This surrounding air. Others believe into the strip is placed under the seats, extending from one end of the car to the other, and is nection is made, because their correspondent stops to think a moment, and thereby give "central" the signal to take the connection down; central is then roundly abused for cutting off the connection. Many people think that telephone wires pick up noises going on round about them, and that they kept away from railways to avoid being af-fected by the trains. In reality, they are only disturbed by heavy currents on neigh-boring wires, and not at all by mere mechanical interruptions; the presence of telegraph wires on all railroads explains the absence of the telephone lines, which would be rendered unworkable by the mysterious "induced" currents that the busy telegraph lines would produce in them.

Naval Electrical Corps.

The idea recently advanced by Lieutenant Bradley A. Fiske that the exigencies of any luture war would demand a supply of skilled and specially trained electricians to supplement the work of the regular army and navy of this country, has been adverted to by Secretary Tracy in his report of the new American navy. In alluding to the advantage of providing a place in the ranks of the naval militia for persons of special requirements demanded by the service, but a character somewhat outside of the ordinary scope of professional training, he draws attention to the growing use of electricity on shipboard, and shows how necessary it is that navai officers should acquire a certain familiarity with the principles of electrical applications. The fact remains, however, that it is quite impossible that the greater part of them can become expert electricians without sacrificing efficiency in other branches of their profession of even more pressing importance.

pressing importance.

Secretary Tracy says that this want would be met by the formation of corps of naval electricians in the different States having naval militias, the advantage of the special training of which such corps would thus be able to avail themselves of. By this means a large, enthusiastic, and highly intelligent bads would be astablished. body would be established, familiar with all the needs of modern warfare, and able to handle naval vessels effectively in time of of the utmost service in fitting out new ressels with electrical apparatus and in taking charge of the electrical plant on board ships in commission. The number of officers available in an emergency would thus be increased as those now detailed to electrical work could be assigned to other

Squeaking Sand.

There has of late been considerable discussion on the subject of sonorous sand which is found in numerous places in this country and elsewhere. The old theory that the sounds are produced by rubbing tober by vital suction, that is, by tapping gether of millions of clean sand grains very unitorm in size, appears to explain very feasibly musical sand, but the explanation does not so well apply to squeaking sand, which is known to exist. These two classes of sounds produced by disturbing sand are both undoubtedly due to vibrations. One sound is caused by the attrition of the particles, and has a harsh character by no means musical, which, in rare cases, becomes a loud squeak. The second is caused by oscillations of the particles themselves protected from actual content by a lastic all contents the second is caused by oscillations of the particles themselves protected from actual contents the slastic all contents the second is caused by oscillations and the second cases. tact by elastic air cushions, and this is decidedly musical in tone. Musical sand yields notes by friction only when dry squeaking sand yields a barsh, shrill squeak (reminding one of the cry of a guinea fowl) best when moist. This latter is very rare. Out of 500 specimensof sand from all round the world, while musical sand seemed to be comparatively common, only two samples of squeaking sand were found to have been taken from places in this country; they were both so-called boiling aprings, one was in Maine and the other in Kansas. A very small quantity of squeaking sand pressed between the thumb and foreinger produces when wet a peculiar shrill squeak—a phe-nomenon which is well explained by the attrition theory.

The Episcope. The episcope is a new device for utilizing the electric light in connection with a stereopticon for projecting pictures on a screen. The great advantage of this mode of presentation is that the object can be shown without any previous preparation of slides or other auxiliary appurtenances. The views are merely the enlargement of pictures on class, and the reflection of a solid mass can, by means of the new device, be readily thrown on the screen magnified many hun-dred times. The advantages of such an apparatus as this in physiological lectures, where the closest intimacy with the various organs and parts of the human body is im-perative, can well be understood, and Prof. Stricker has for some time used the episcope in his lectures at the University of Vienna. The apparatus is, in many respects, a micro scope on a large scale, as it can receive an object weighing as much as, and of the same size as, a dog of 12 pounds. It is used for showing the pulsations of the heart and the functions of other vital organs, and the student can now derive the fullest benefit rom his course of lectures from the fact that the minutest details, which formerly could be only described, can now be made the objects of closest scrutiny and accurate

The Kew Bulletin for November contains an excellent account of the cols nut. In early times this nut was supposed to be used merely as a means for rendering water sweet and palatable when drunk before or after meals. But it was soon found that it possessed other properties, among which was that of supplying a necessary stimulus to those who have to endure an occasional or prolonged deficiency of suimal food; for in West Africa, as in other parts of the tropics

Sand and salt boxes, and track scrapers | the flesh of animals is often scarce and diffi-Peru, which seems to play in those countries the same part that the cola nut does in South America.

New Decorative Process.

A new process by which artistic designs can be photographed on paper, cotton cloth, velvet and other fabrics, is becoming the "croze" in England, as any lady can, by its means, take any white fabric and print upon it designs to suit her own taste, and in which pressed leaves will serve instead of a transparency for the production of many effects. At a recent meeting of the Photographic Society (England) a well-known photographer printed different leaf patterns upon different parts of a piece of white cotton cloth. He then developed the different patterns with waters with a property of the product of the produ patterns with various developers by applying each of the latter locally with a brush; the result was a pretty series of designs in variegated colors upon one piece of cloth. The colors at present obtainable by the use of developers in the process are red, orange, purple and maroon; by mixing the purple and orange developers an unsatisfactory kind of an approach to green is said to have been obtained. Developers to yield blues and greens with this process have yet to be

Electrical Furnaces.

It seems not unlikely that electricity will be applied to smelting furnaces, in the near future. An electrical furnace has been patented in England which is said to have order to get the best results he nught to given excellent results in the series of tests to which it has been subjected. The eleccases containing the carbons are kept cool Provision is made in the furuace for the escape of gas and for the introduction of the charge, and the electromotive force o the current can be varied according to the varying resistance of the charge,

The Path of Storms.

A method is now on trial at the meteorological office at Stockholm, which seems likely to throw some light on a subject which hitherto has been attended with much uncertainty, namely, the determination of the path taken by storms. From the telegraphic weather reports, tables of the density of the atmosphere have been constructed, and other data been collected which have been embodied in special charts. These charts are found to give much more reliable clue to the movements and origin of cyclones than the usual method of the comparison of the isobars and isotherms alone. The latest investigations show that storms move in the direction of the warmest and dampest air, parallel to the lines of equal density, leaving the purer air to the right hand.

Prices of Incandescent Lamps.

The recent reduction in this country of the prices of the Edison incandescent lamp to 44 cents excited a great deal of comment from the fact that it affected many issues of the greatest interest and importance to the public as well as to electricians. The principal of an electrical supply firm in England writing to a London electrical paper, says: "I notice in your last issue a note on the resent low prices of incandescent lamps in the State (i.e., 44 cents each.) I thought it supplying lamps (made within 300 miles of London,) o'a quality and durability second to none—including the 'Edison-Swan'—at the still lower price of 38 cents each, fitted and delivered free, and there is every prospect of lowering this price in the near fu-

How to Get Sound Views. ectrician Nikola Tesla. in taking part in a discussion on alternating moters in the columns of an English paper, made some remarks well worth the attention of young electricians. He says: "You state that I have misinterpreted my results, and it looks as though you believe my views to be unsound. Your arguments are those of an eminent scholar. I was myself a fair For years I pondered, so to speak, day and night over books, and filled my head with sound views—very sound ones, indeed—those of others. But I could not get to practical results. I then began to work and think independently. Gradually my views became unsound, but they conducted me to sound results."

Lagging for Steam Pipes. A cheap and efficient lagging for steam pipes can be made out of some of the waste

products of paper manufacture. The waste products in question are chiefly those com-ing from the different cleaning and sorting muchines, which are of a fibrous nature When dry they are mixed with potter's earth in the proportion of four to one, enough water being added to make a plastic compound. This is spread by hand over the surface to be protected in thin successive layers. When dry the coating is said to adhere firmly, and it has the additional mendation of entailing no greater cost than that of mixing and applying it.

Floating Disinfectant.

A patent floating disinfectant, which has recently come into use, appears to possess the three very essential advantages of efficiency, simplicity of application and uniform solution. A mixture of carbolic acid and other disinfectants in a solid form is so prepared that it will float in water. This melts slowly in the water, and is always visible and accessible. The uniform rate of solution adapts it specially for use in closets. All that is necessary is to place a block of it in the water cistern supplying the closets. All danger of blocking up the pipes is avoided, as the disinfectant is always on the top of the water.

Building Materials in Vogue.

The investigations of fire ruins show that porous terra cotta bricks best resist fire, as well as water and frost; after these in fire resisting qualities come the various concretes and burned clay work. In the most approved building work now in vogue the iron part is eneased on terra cotta, tile or brick work in roof, floor and tile construction, and the hollow tiles are faced with vitreous tile, slate or any good weather-proof coating, or with a single thickness of brick. Iron and steel work, incased in fire-proof materials, is just now very much in favor.

Preventing Incrustation in Boilers. Attempts are now being made to perfect a system of preventing incrustation in boilers by means of electrical action. Fairly good results are said to have been secured by the use of a small alternating current dynamo, having one plate connected to the shell of the boiler and the other to plates suspended in the water. The theory involved is that the passage of the current deposits alternate-ly hydrogen and oxygen on the submerged surfaces, and the union of these two gases forms a film of chemically pure water, which protects the metal protects the metal.

Clip for Bubber Shoes.

A new idea which seems capable of development into a valuable invention is a clip, which when affixed to rubber shoes facilitates their drawing on and taking off, lessening the injury to their edges and in-suring a better grip on the foot for them. The clip, which is of steel, is inserted in

THE SPIDER'S It is a Cable Made Up of Strands

Finer Than Can be Seen.

HOW THE LITTLE ANIMAL WORKS.

Meteoric Bombardment of the Farth That

Doesn't Hurt Us.

MAKING THE CABLE.

weaver of the finest silk fabric. It has on each foot three claws, one of which is a sort

of thumb, while the others are toothed like a comb. These claws are constantly used to

But while the spider's work is the more

delicate that of the silkworm is the more useful. Nearly half of all the people in the

world live in China and India, and all of

them, except the very poorest, wear silky goods as commonly as we wear cotton. As it takes the labor of nearly a thousand silk-worms to make one pound of silk, you can

see what an enormous industry results from thistiny thread spinning. Unlike the spi-

der, whose spinning works are at the lower

extremity, the silkworm's factory is near its

mouth. The crude material is seemingly

much alike in the two classes of spinners-a

gummy or glutinous pulp. The spinning

appurtenances, however, are entirely differ

ent, the silk worm making only two strands

for its thread, while the spider makes thou-

ADVENTURES OF A SILEWORM.

infirmities of age coming on, and it makes

arrangements to literally "shuffle off this mortal coil." By this time it has secreted

in its body the raw material from which it

After selecting some scaffold-like place

the caterpillar first spins some flossy silk

Then it begins to wind its threads round

and round until it has enveloped itself, as

the carpet moth grub does, in what is called a cocoon, generally a little larger than a

pigeon's egg. When the cocoon is com-

pleted the worm sheds its last suit of clothes

and carefully tucks them down at the lower

end of its house. Then it goes to sleep. While it sleeps a new and very thin skin

forms, wonderful changes take place in the animal's appearance, soon the head end of

the cocoon breaks open, and out comes not the caterpillar but a beautiful butterfly!

BOMBARDMENT OF THE EARTH.

our earth undergoes every 24 hours. If you will look at the sky one of these clear De-

cember nights you will soon see one or more of the familiar "shooting stars," so called,

darting through a portion of the heavens. They are not stars, but small particles of the

material out of which stars and worlds are

made. They are composed of the same ele-ments that exist in the stars, in the comets,

and in all the nebulous matter that is dis

Meteors and sereolites, which are the cor-rect names of these luminous little bodies,

are fired into the earth's atmosphere at the computed rate of 400,000,000 in 24 hours.

can see the missiles only at night. But the

earth's defensive works are perfect. They are not made of stone or of earth embank-

ments, but of air. Yes, the earth's atmos-

phere is a perfect defense from all the shots

fired at us from outer space, for it not only

stops the missiles, but burns them up. Of

all the meteors shot at the earth, not one reaches the ground, the friction produced by

their great velocity through the upper air acting on them like a blast furnace on a

sheet of paper, and only minute remains fall

Occasionally one of these missiles is so

large that it escapes total destruction by the

atmosphere. That is, the terrible heat generated by the friction does not reach the

center of the missile, and therefore the heart

of it, so to speak, reaches the earth. This

class of bodies are called nereolites. Not one in a million of the fiery little bodies

reaches the earth, and thus earns the name

of sereofite, meaning air-stone.

There are a few, but very few well au-

thenticated cases of large aereolites reaching the earth. One was found in Siberia, a mass

of iron and nickle, which weighed nearly a

ton. There is one in Buenos Ayres partly

buried in the ground, whose weight is esti-mated at 16 tons, and another in Brazil weighing about half as much. But there is

no case on record of a person being struck by an aereolite, and with the practically in-

vulnerable defense that even atmosphere

dred million meteors be fired at us every

THE ABRIAL OCEAN.

Thus it seems, that on the surface of the earth we are living at the bottom of an ocean more than 100 miles deep. It is the aerial ocean, and in some respects it is simi-

lar to the Atlantic or the Pacific ocean. It

is thought by some of our foremost scientists that there is a well defined surface to this

ocean, on which are great serial waves, exaggerated forms of what we see on the surface of water. Other scientists, however, believe that the density of the air gradually

safely runs the gauntlet of the atmospher

THOSE THAT DO NOT BURN.

harmlessly.

The bombardment is perpetual, though

tributed throughout the universe.

All the common shots that have been fired

which attaches to whatever is convenient

sands.

spins its silk.

THE AIR ACTS AS AN ARMOR PLATE THE non-commissioned officers' school of the Eighteenth Regiment, met last night in the headquarters of the regiment. Lieutenants Lowry and Drake were the instructors. (WRITTEN FOR THE DISPATOR.) "As fine as silk" is a common phrase to CAPTAIN GEORGE WELSHONS, of the Eighttypify extreme fineness or delicacy of texteenth staff, spent a few days in the East last week, and while away took dinner with Gover-nor-elect Pattison. George is strictly in it this ure. But if you want a simile that will discount that one say, "As fine as a spider's

web." There is nothing of textile kind so In the election in Company H, Tenth Regifine as that. The strand spun by a spider is ment, located at Washington, Pa., caused by the promotion of Captain Mowry as Major, James Barnett was elected Captain, Simon Baker, First Lieutenant, and George Braden, Second Lieutenant. as much smaller than a thread of silk as the latter is smaller than a telegraph pole. This seems like exaggeration when you casually look at the spider's workmanship CAPTAIN HENRY SCHMIDT, of Company A, and then at the silk worm. But you never saw a single strand in the spider's thread. The strands are so fine that you couldn't see

Fourteenth Regiment, has been lying seriously ill at his home on Seventh avenue, the result of a paralytic stroke about a week ago. Captain Schmidt has won the reputation of being quite a hostler in the Fourteenth, and his friends them with the naked eye. What you really see when you look at the spider's delicate will be sorry to learn of his illness. thread is a cable composed of thousands of CAPTAIN J. A. A. BROWN has been drilling strands, and the way the little animal makes squads of policemen in the armory of the Eighteenth Regiment for the past two or three this cable is one of nature's greatest wonders. weeks, and, while the "bobbies" march in a pretty fair manner, they might get a few points if they went around on an off night and watched some of the companies tread the boards. If you look closely at a spider during its business hours you will see that its thread comes from a circular spot near the extremity.

In this spot are from four to six knobs, the THE Secretary of War has ordered a board number depending upon the kind of spider. of officers to assemble in New York City on If you happen to have a particularly good December 16, for the purpose of considering and recommending a suitable magazine system for rifles and carbines for the military service. No rifles will be examined of a caliber over .30. This shows that the day of the large bore gaus in the regular service is about past. pair of eyes you can distinguish these knobs. Each of the knobs is full of minute holes, so small that a good microscope is necessary 10 order to see them. Through these holes

up to the top of the aerial ocean. There is,

GOSSIP OF THE GUARDS.

THE number of desertions in the regular the delicate strands are spun. About an army for the year ending September 30, were 2.086, against 2.751 in the previous year. Of the eighth of an inch from the holes the strands are joined together, and the result is the spider's thread, with which all of us are so 400 officers now on the retired list, 53 were re-tired by reason of the loss of a limb, and 93 others were retired for wounds. Only 87 of the 400 are West Point graduates, and all but 23 of the whole number served in the late war. And the little spinner attends to business as closely and as carefully as does the

QUARTERMASTER JOHN HUBBARD, of the ourteenth Regiment, purchased a big black bear last week, which was represented to be as tame and gentle as a baby. As soon as Mr. Hubbard can bribe some reckless citizen to go into the stall where the bear is chained and take him away the people of Sharpsburg will once more breathe the pure Allegheny river air in a contented manner.

help to keep the strands from tangling be-fore they are joined in the thread. The material from which the thread is made is secreted in the animal's body. It is a ADJUTANT GENERAL HASTINGS has completed his report as to the condition and workings of the National Guard for 1890. A number glutinous substance, and the strands dry while they are passing from the little aperings of the National Guard for 1890. A number of interesting recommendations and suggestions are made, the general tenor of the report showing a big Improvement in the militia during the General's term of office. No mention is made of the report for 1880, which the soldier boys have been looking for since last January, and it is to be presumed it is still lying in Harrisburg printed but unbound. tures to the point where they are joined to-gether. One authority on this subject, Reaumur, calculated that it would take 1,000 spider strands to occupy a space equal to the point of a needle, while another, Leuwenweck, estimated that it would take 4,000,000 of them to make a thread as large

CAPTAIN R. W. A. SIMMONS, of Company H, Eighteenth Regiment, has preferred charges against two of the members of his company for insubordination. The charges are now in the hands of Colonel Smith, and it is probable a court-martial will be ordered, as Captain Simmons asserts his determination of pushing the matter to a result. It will probably be a good thing for the discipline of the local regiments if a court was ordered now and then, and some of the men who continually refuse to act in a soldierly manner placed in their proper posi-tions.

THE State warrants for the annual allowancès to the various companies of \$500 each arrived in the city last week and will be issued to the company commanders at once. Those Cap-tains in the Eighteenth Regiment who had filed their proper bonds were given their warrants last night by Col. Smith. Those in the Fourteenth Regiment will be presented with theirs by Col. Perchiment at the regular monthly meeting to-morrow night. The warrants for the armory rents and rifle practice commutation will not be sent down until later in the month.

The life and adventures of a silkworm make an interesting story. The first stage is an egg laid by a butterfly. This egg produces what we call a grub or maggot. The THE big fair of Battery B opens to-morrow night in the armory, on Fifth avenue. The boys have been working hard, and the interior duces what we call a grub or maggot. The animal is quite small in infancy, but its growth is so rapid that its clothes are conof the building presents a very pretty and in of the building presents a very pretty and in-viting appearance. A number of booths have been erected and placed in position, and these will be in charge of a number of young ladies, who have volunteered their cervices. Special features will be on the programme for each night. Mayor Gourley will be present to-mor-row evening to make the opening address. The fair should be well patronized by both members of the Guard and the public generally, as the object is for the purpose of new uniforms. tinually getting too small. When it is a few days old its growth makes the skin too tight, this covering splits open on the back, trousers of a boy. This change occurs four or five times before the maggot becomes a full-grown caterpillar. Then, after a short stage of maturity, the caterpillar finds the object is for the purpose of new uniforms

OWING to the efforts during the past week of several of the officers interested in the gymnasium of the Eighteenth Regiment the scheme is now an assured success, and the boys will hortly have a chance to limber up their shortly have a chance to limber up their muscles in the new room to be fitted up. The idea is certainly a good one and will tend to draw the members of the regiment around the armory during the winter months, and make thing pleasant for them while there. The annual indoor sports of some of the kastern regiments are looked forward to with great eagerness by the members of the organizations, those of the Third Regiment last week attracting considerable attention.

GOVERNOR BEAVER is making an effort to have Governor-Elect Pattison consent to having the National Guard attend the inaugural peremonies in January, and the probabilities are that his efforts will be successful. If the new Governor wishes to start out by winning the approbation of the militia boys down the ine, he will decide to step into his new position without their presence. They have painful recollections of the list inaugural parade at Härrisburg, and it is scarcely probable they want the dose repeated. It is well enough for individuals who occupy carriages or view the proceedings from a window to desire the turnout, but the feelings of the men who stand out in the freezing air for hours should be taken into consideration. The trip is a ridiculous one considering the short time the men are in Harrisburg, and the long distances many of them are compelled to come in crowded cars, and without their presence. They have painful since the first cannon was cast do not equal in point of number the bombardment that are compelled to come in crowded cars, and should be relegated to the rear with several other back number ideas now in vogue in the

> American Institute Farmer's Club. Report the wines of Alfred Speer, Passaic. New Jersey, the most reliable, and his Oporto grape wine as equal to any in the world. For sale by druggists.

> > Dinner Sets.

We have now a complete stock in all the medium and fine grades of china, porcelain, etc. Over 250 patterns to select from. Most of our new stylish patterns we sell in open stock; 100 pieces decorated dinner sets as low as \$8 75. Store open till 9 o'clock at C. Reizenstein's, 152, 154, 156 Federal street,

MISS FLORA BATSON, the colored Jenny Lind, assisted by local talent, will sing at Wylie Avenue A. M. E. Church, December 8, and in Allegheny, at Brown's Chapel, December 9; Avery Mission, December 10; Sandusky Street Baptist, December 11, and in Pittsburg, at St. James', East End, De-cember 12; John Wesley, December 17; Ebenezer Baptist, December 18. Tickets, 50 cents; children, 25 cents.

Cream Ale-Rack Ale Are genuine winter drinks. Our makes are most appetizing and beneficial. IRON CITY BREWING COMPANY. Telephone 1186.

CABINET photos \$1 00 per dozen; good work; prompt delivery. LIES' POPULAR GALLERY, 10, 12 Sixth st. TTSU

GOLD and silver-mounted walking sticks at Hauch's, No. 295 Firth av. WFSu 24. Louvre. 24.

Come to this popular glove emporium;

grandest Christmas display now going on. Kid gloves in many new shades not to be found at any other store. 24 Sixth st., directly opposite Bijou Theater. No connection with any store of same name. A PINE selection of the celebrated Henry

F. Miller Plance at W. C. Whitenill's Music Parlor, 152 Third avenue, Pittsburg. Money Saved by Those Who

Attend the great special sale of men's over-coats and suits at the P. C. C. C., Pittsburg Combination Clothing Company, corner Grant and Diamond streets, opposite the

KILLED BY A SAW.

from the earth's surface, and that the ex-treme upper limit is indistinguishable. However this may be, we know that the air is a fluid body, that it has weight and An Indiana Mill Owner Meets With a Hor-

elasticity, and that every square inch of it weighs 15 pounds. This means the weight of one square inch at the bottom, reaching PRECIAL TELEGRAM TO THE DISPATCE. COLUMBUS, INB., Dec. 6.-Ten miles north of this city, Uriah Howe, who owns a sawmill at Geneva, met his death to-day in a horrible manner. About 4 consequently, an immense sir pressure, in every person, but we don't feel it decause the pressure is equal on all sides of us. If it were only downward it would fasten us to the earth as tightly as a fly caught in a riue pot.

I. H. WEBB. o'clock he was at work in the mill, and in some manner was caught by a belt, which torew him upon a circular saw. His arms, legs and body were frightfully cut and mangled. Death was almost instantaneous. He was 44 years old, and leaves a wife and

several children.

Howe was quite wealthy and had recently expressed a desire to quit the milling busi-ness, having grown suspicious, it is said, of a fatal accident, and had disposed of his property. He met his death on the last day he was to operate it.

Excellent advice always. Adopt it in the treatment of kidney and bladder inactivity and you will avoid danger. Healthfull, but moderately, impel these organs, if slurgish, to act by the early use of Hostetter's Stomach Bitters, no less a diuretic than a tonic and general alterative. Don't forget, also, the timely aid it afferds when majarial, liver and rheumatic complaints manifest themselves.

Henry F. Miller Planos. The Henry F. Miller Pianos have gained pre-eminent artistic reputation, the result orchestral concerts of America, as also the concerts of the world's most distinguished planists and vocalists, who have, from time to time, selected as their first choice the Henry F. Miller Grands to accompany them on their concert tours throughout the

The Henry F. Miller Upright Pianos are artistic and correct in design. They should be seen by all interested in high-grade pianos.

A fine selection of these famous instru-ments at W. C. Whitehill's Music Parlor, 152 Third avenue.

United States

UPRIGHT PIANO \$200.

Upright Plano \$150-Square Plano \$140. An excellent 7 1-3 octave upright piano with latest improvements, splendid tone and handsomely carved case will be sold, fully warranted, for \$200, including cover and stool; also an upright pisno in perfect order for \$150, and several first-class square pianos of the most celebrated makers at \$140, \$175 and \$200, etc. For a great bargain call at the music store of J. M. HOFFMAN & Co.,

537 Smithfield street. The celebrated Sohmer pianos, the superb Colby and Schubert pianos at rare bargains.

UPRIGHT PIANO AT A SACRIFICE.

Great Bargain for Cash Buyer. An extra fine toned and beautiful cased upright plane of a leading make and used only a short time, will be sold for \$250 cash, worth new \$500. The owner is moving away and wishes cash for instrument, hence the great reduction to make quick sale Can be seen at Henricks' Music Co., Lim. 79 Fifth av.

Be Sure and Come

To the Rustic when you want a nice, clean lunch. Many business men do not care for a heavy dinner at noon, but prefer a light lunch. If you are one of those you should not fail to call and see us. We serve the best and purest food in a novel way, which you will appreciate. Our coffee is delicious—a trial will convince you. Remember, we serve ham and tongue sandwiches, milk, coffee, pies, etc. Be sure and call; you will be pleased. "The Rustic," 35 Diamond street, back of J. R. Weldin & Co.

ZEPHYR ginghams, best French and Scotch makes, 40c and 50c qualities and designs, reduced to 15c a yard during our clearing sale.

HUGUS & HACKE.

NOTICE-1,300 acres valuable mineral and timber lands, solid body, near Chatta-noogs, Tenn., for sale. W. L. SALVAGE, Chattanoogs, Tenn.

DESERVING OF CONFIDENCE.—There is no article which so richly deserves the entire confidence of the community as HROWN'S HRONGHAL TROCHES. Those suffering from asthmatic and bronchial diseases, coughs and colds should try them. Price 25 cents.

Stylish Suitings,

Overcoat and trouser material, of the best quality at Anderson's, 700 Smithfield street. Cutting and fitting the very best. Su GENUINE Alaska seal capes, newes shapes and very best qualities, now \$50 were \$70 and \$75. Hugus & Hacks.

FURNITURE packed, hauled, and stored. HAUGH & KRENAN, 33 Water street.

FOR a bargain attend our grand holiday and clearing sale. HUGUS & HACKE.

FREE GUESS CONTEST. NOTICE.

It is desirable to have all tickets handed in for record, with the guess, in the prizes to be awarded at HIMMELRICH'S SHOE HOUSE, 916 Braddock avenue, BRADDOCK, as early as practicable, as the award is to be announced JANUARY 1, 1891.

In the meantime, all those who have not availed themselves of an opportunity of buying Shoes at lowest rates should do so at once. Free Guess Tickets with every purchase

HIMMELRICH'S, 916 Braddock Avenue, BRADDOCK.

de7-75

CHRISTMAS GIFTS

Of Genuine Diamonds are the most agreeable and satisfactory. We herewith quote you a few prices from our immense assortment, consisting of Rings, Studs, Ear Drops, Brooches and Scarf Pins: Misses and children's rings, set with genuine diamonds, from \$3 to \$8 50; ladies and gents' genuine diamond rings from \$10 to \$125; ear drops, mounted with genuine diamonds, from \$11 50 to \$300; gents' genuine diamond studs from \$7 50 to \$150; ladies' brooches and lace pins, set with genuine diamonds, from \$15 to \$110. With a collection of \$75,000 worth of the above goods to select from.

K. SMIT.

FIVE STORES IN ONE. 932 and 934 Liberty St. and 703, 705 and 707 Smithfield. We invite you to call and examine our goods before purchasing elsewhere. de7-rhsu

More of "Laird's Shoes" are worn in and about Pittsburg than any other make. This statement we can prove. And why?

LAIRD'S SHOES ARE THE BEST!

LAIRD'S STYLES ARE THE LATEST! LAIRD'S PRICES ARE THE LOWEST!

Laird's Shoes are perfect fitting, neat and tastily constructed, always flexible and comfortable. These points not only apply to finer grades, but are carried out in our medium and heavy goods as well. If you wish a handsome pair of

HOLIDAY SLIPPERS

At 50c, 65c, 75c, \$1, \$1 25, \$1 50, \$2 or \$2 50 we can show you all the newest patterns.

LADIES' OR GENTS' FINE SHOES

At \$2, \$3, \$4, \$5 and \$6.

We have an immense stock in all grades. OUR BOYS', YOUTHS' AND MISSES' SHOES

At \$1, \$1 25, \$1 50, \$2 and \$2 50 are celebrated for style and OUR BOSTON AND BAY STATE RUBBERS AND GUM

BOOTS are absolutely the best. WE BUY FOR CASH. WE SELL FOR CASH.

ONE PRICE ONLY.

M. LAIRD.

406-408-410 Retail Stores, New Retail, Market Street. Retail Stores, 433 Wood St.

WHOLESALE STORE 515 WOOD STREET.

Dealers supplied promptly at Eastern wholesale prices. No advance in prices from December 1.

It's poor policy to put off purchasing holiday goods until the eleventh hour. Experienced buyers invariably make their selection as early as possible. By so doing they get first choice of the many novelties that always make their appearance at this season of the year.

We are positively showing the largest stock of goods suitable for holiday gifts ever seen in Pittsburg. Printers' ink fails to do it justice. Our beautiful display of things, useful and ornamental, must, indeed, be seen to be appreciated.

OF THE MANY! Jewelry of all kinds, Muffs, 50e to \$15.

Hemstitched Handkerchiefs,

Lace and Embroidered Fichus,

JACKETS!

are lower than the cost of material. Below are some of the special bargains which we know

cannot be matched elsewhere. We promise you a big saving on every purchase made in our Cloak Rooms.

Ladies' Fine Cloth Wraps, with

elegant trimming, 89 to

Initial Silk Handkerchiefs.

Fine Feather Ruchings,

Knit Woolen Skirts,

Knit Woolen Shawls.

Fine Cashmere Shawls.

Whisk Holders.

Music Rolls.

Wall Pockets

Kid Gloves,

Silk Mufflers,

Evening Fans,

Fur Top Gloves,

Derby Silverware, Fine Vases and Ornaments, Real Trent and Hungarian Ware, Oxidized Silver Boxes, Looking Glasses, Jewelry and Work Boxes, Manicure Sets, Shaving Sets. H'k'ch'f Boxes and Pin Cushions.

Glove Boxes, Mouchoir Cases. Silk Pillows, Fine Glass Bottles, Fancy Baskets of all kinds. Beautiful Screens.

Boreas and Jack Frost have at last conspired to make heavy winter garments a necessity, and ladies cannot longer prudently dispense with them. Our stock of these goods is second to none, and the prices

Recollect there are hundreds of styles here to select from. All garments are new, stylish, substantial and perfect fitting. Seal Plush Jackets, \$7 85, \$9 75

and \$12.

Seal Plush Jackets, extra long, \$12 to \$19 75. to \$29 75.

Seal Plush Sacques, \$10, \$14 85

Ladies' Cloth Newmarkets, 84, \$5, \$6, \$8 to \$12.

Misses' Short Coats, 81 50 to 89 75.

Misses' Long Gretchens, \$3 to

Ladies' Tailor-made Jackets, 83 to 815; best values ever offered.

Fur Capes, 83 to 825.

Fancy Silk Scarfs,

Ladies' Underwear,

Gents' Underwear,

Infants' Underwear,

Misses' Underwear.

Silk, Lisle and Woolen Hosiery.

Boy's Underwear.

Babies' Kid Shoes,

Babies' Shawls.

Babies' Silk Shirts,

Babies' Fine Dresses,

Baby Sets and Wrappers,

Silk Booties,

Ladies' Fine Fur Trimmed Jackets, 86 75, 89 95 to 820. Infants' Long Cloaks, \$2 to \$15;

beauties, every one of them.

UMBRELLA

Needs no commendation from us. It is on a grander scale than was ever attempted by any house west of New York. Over a thousand styles of handles, many of them works of art. We GUARANTEE A SAVING of from 20 to 40 per cent on every Umbrella purchased at these stores. It costs nothing to see the magnificent collection, and if you invest you'll be a gainer to the extent mentioned. Come this week before the assortment is broken. Names or initials engraved free of charge on all Umbrellas purchased here from

510-514 MARKET STREET