THE FARMERS' ALLIANCE LINCOLN, NEB., THURSDAY, OCT. 29, 1891.

SCIENCE AND PROGRESS.

VALUABLE INFORMATION FOR MANY READERS.

Amateur Astronomers--An Automatic Pitcher--Artificial Teeth for Horses -- A Paper Hotel --Cast-Iron Railway Bridges.

Amateur Aatronomers,

The number of amateur astronomers is considerable, and it is safe to say that of all the sciences this is the one that can boast the most adepts among private persons. Among 1,160 | humane than that of being shattered | The tonsels swell in a few hours so as toastronomers now living, whose works by an old-fashioned "slug," but the almost shut up the passage to the throat, have gained a footing in science, about Germans say that the new projectile half are amateurs with private observatories. In England, including the body, greatly simplifying the surofficial establishments and those at- gical treatment. There is no doubt tached to the universities, there are 34 observatories; in America, more than 80; in France, 17; in Austria, 24; m Italy, 21; in Russia, 15; and in Bel- suffering from a wound as much gium, 5. We may say that an ama-teur, armed with a telescope, is to be the telescope of telescope found at every point on our planet, of the modern shape would be likely throat and larynx close up and the pa-ready to observe a celestial phe- to bend they are cased with steel or tient diss suddenly of sufficient dissolved with nomenon. In Chili, Honduras, Peru, nickel tubes, which gives them the New Zealand, Tunisia, and Tasmania we can meet astronomical amateurs provided with instruments, who devote their night hours to contemplating the beauties of the starry vault and to collecting observations which shall be useful for the advancement of science.

star-clusters are the fruit of individual researches. Were not all those amateur astronomers who, in the first ages of history, in Chaldea and Egypt, China and Mexico, drew from Nature the first explanations of celestial phenomena? From the beginning of historic time down to near our period. astronomical science has advanced only by the labors of philosophers, who pursued it as a matter of taste and not officially-The Popular Science Monthly.

An Automatic Pitcher.

An automatic machine has been designed in England for the use of cricketers, which it is proposed to utilize with some modifications for practice in base-ball batting. The new automaton is specially intended ro meet the wants of small cricket clubs whose finances will not admit of their employing a professional "coach." In tance. this invention they find a bowler who never gets tired, is never off his play, never grows impatient with the young livers the ball. By an ingenious ar- establish the connection with the rot. rangement the speed may be regulated office, which then effects the further dipatheria. and maintained with the greatest connection with any desired subscrib-nicety, and the pitch of the ball can er m Frankfort and district. Should be determined beforehand and sus- the required connection not happen tained with wonderful exacitude. The to be at the moment available, the pace may be increased or reduced official in the telephone office in his without altering the pitch, and the turn presses a button, rendering it pitch may be adjusted nearer to or possible for the person at the autofather from the batsman without changing the pace. The disk is en-graved with a register and carries a more than the ordinary run of autograved with a register and carries a suitable pointer, to enable the manipulator to obtain the delivery desired and alter it when necessary. The ball rests upon a rigid steel loop, and is held in place by a leather cap, the steel ring on which is retained in place by an automatic catch, and the princ ple of the machine consists in releasing the ball from the delivery arm at a definite and predetermined point in its revolution. The direction is regulated by a large cross-handed screw in the base of the standard on which the device is fixed, and sights on the delivery rod enable the operator to lay the hall dead on any required spot. the machine remaining so trained until intentionally altered.

which is made to to be fired from a rine of small caliber, is long, so that its "weight of section," as it is termed by soldiers, is large, while its actual weight may be smaller than that of bullets of the old shape. By combining great weight of section with small brane forms in the throat and on the tondiameter great velocity is given to the sels, there is a sensation like cotton stickprojectile, as well as such penetrating force that it will easily go through two or three men at the distance of a question the mercifulness of the new great debility and prostration which con- with diphtheria in from twelve to twentymile. M. Delahaye, who is calling into

tinues for weeks and months even in the four hours. bullet, regards the new process of mildest cases. In severe cases the thaoat being drilled through by a bullet shaped like a lead pencil not much more the patient cannot swallow food or drink will not remain in the wound, but will without great suffering. A thin serous make a straight perforation through fluid is constantly discharged from the throat and nose. The glands about the neck swell in proportion to the severity of that the camp undertaker will in futhe disease. If not hard and much swol-len the patient may recover; on the other ture have more to do after a battle and the surgeon less than under the hand if there is much tumefaction the case old regime, but as a soldier dreads long will end fatally. In from twelve to forty-eight hours the false membrane forms on the tonsils, vale of the palate, and extends up to the nose or down into the the right side. As lead bullets lungs, about the fourth or fifth day the

property of penetrating the hardest alkalies, and constant watchfulness, the bone without deviating from their course. To Stop Coughing and Sneezing.

Dr. Brown-Sequard, in one of his Dr. Brown-Sequard, in one of his lectures, dwells with great emphasis filled full so that it protruded half an inch on the importance of general knowl- or more. If the patient finally recovers small planets, variable stars, and edge in the matter of checking cough- great debility of the vocal organs remain ing and sneezing. He states that coughing can be stopped by pressing on the nerves of the lips in the neighborhood of the nose, and sneezing may as in cholera and yellow fever-about be stopped in the same way. Press-thirty-three per cent, or about one-third including the mild and severe cases. It ing in the neighborhood of the ear, frequently takes four out of five, and nine right in front of the ear, may stop out of ten, and twelve out of thirteen in coughing. It is so also of hiccoughing, families and sometimes destroying entire but much less so than for sneezing or families. coughing. Pressing very hard on the arresting a cough and the will itself is often found to be a wonderful preven. roof of the mouth is also a means of often found to be a wonderful preven-

tive. Dr. Brown-Sequard points out that in addition to the many ordinthan forty-eight hours. ary reasons why people should know these simple facts, there are conditions under which this knowledge may prove of the greatest value. In bronchitis and pneumonia, or any acute affection of the lungs, hacking or coughing may lead to serious results and the ability to readily mitigate or arrest them is of the highest impor-

An Automatic Telephone.

ing the last 200 years; that it terminated In addition to the ordinary public telephone in the post office of the the life of George Washington and that ideas, who will deliver balls at exactly telephone in the post office of the of the of tempes desired, and with the assistance of one small boy will has just been installed, for the conbowl from morning until night. The venience of visitors, by Messrs, Gould tis. About forty-seven years ago Mr. Corwin of Pennsylvania, had two little machine is of simple construction. A and Co., of Berlin, a new automatic girls, one was taken sick with canker-ash, telephone. The person wishing to called the "prime mover," in the shape of a powerful spring, and a slender steel rod carrying the ball is fixed thereto; a few turns of a handle wind up the spring in readiness, and a slight pressure on a shorter handle releases it and de-blog to b b b b. The symptoms were those of

ITS PROPAGATION.

tient and took the disease in a frost-bitten

M. M. Lespien gives an account of a soldier who took the disease by using a Its Symptoms, Fatality, Origin, Mode of Propagation and the Remedies. teaspoon after a diphtheric patient. (By Dr. A. P. Burrus of Lincola.) In mild cases the symptoms are much

DIPHTHERIA.

like a comon cold, often the false mem-

in the throat, and the patient makes con-

stant efforts at hawking and coughing to

dislodge it. The duration will be from

false membrane is kept dissolved with

patient will live until the tenth or four-

teenth day, finally dying of exhaustion.

During the second week the false mem-brane extends to the stomach and bowels.

I have seen it when the tongue and lips

and many do not recover fully for five

FATALITY OF DIPHTHERIA.

The average mortality is about the same

Its fatality is chiefly among chil-

ITS ORIGIN.

more than 2,000 years. Egypt is its native land where it has been known for thous-

ands of years as the Egyptian ulcerated

In 1859 there was a severe and fatal epidemic in Paris when Breatenneau gave

prevailed in every part of the world dur-

has

it its present name. Aitken says

The history of the disease reaches back

years, and some never fully recover.

NATURE OF THE CONTAGION. The poison is acid and not entirely unthe that which issues from the fangs of the rattlesnake or the bee's stinger, but embles the oil of cantharides nearer than any other agent the chemist has been able to discover for which there is no antidote. Professor Aert of Germany, introduced small particles of the false membrane into ten to fifteen days. It leaves behind it the haunches of rabbits and they died

It is be leved by some authors that the contagion remains in the room where pais sore, and the soreness increases rapidly. tients have had diphtheria for a long period of time adhering to the walls, chairs, carpets, bedding, etc. No pains should be spared to destroy all contagion and stamp out the disease. THE REMEDIES.

The first of all remedies is to keep children and young people entirely away from the disease; keep them out of the room; another house is preferable. Always avoid a croupy cough at school, church, hotel, on the cars or at the party and dance-in fact every where. Young chil-dren will refuse food and drink, and all medicine on the fourth day and cannot wallow it if they would, therefore but little can be expected from the healing art in severe cases. Membraneous croup is the former name of diphtheria filty years During the first week keep the inbranes dissolved if possible. The inzgo. halation of spirits of ammonia is useful. Gargies may give some relief. Gener-ous diet and good ventillation are not to be forgotten. According to the experiments made by Bricheteau and Adria, the e membrane is dissolved in diluted lactic-acid, (of zo per cent strength) in from 14 to 15 minutes; in lime water in

from 18 to 20; in a saturated solution of chlorate of potassa in from 20 to 25 min-utes. The fumes of tar and sulphur have ocen recommended. I prefer the fumes of tolou (telou is the frankincense of the ancients used for our savior) and balsam of perue to tar, and sul-phate of soda to take internaly to kill the

bactoria fungi. During the second week eggoog is to be given freely, new milk if it can be taken, chicken broth etc, Oil of turpentine is highly recommended of late. Brandy should always be at the bed side and it may be given freely as the signs of heart failure come on. Mercury and dren under 15 years of age. But it has its compounds, and sulphur and its com-pounds are the chief medicines relied on can not examine the throat of a patient at the present time. The fumes of acetic acid gives great relicf when inhaled. Dr. Sanders, of Grand Island has just rewithout running the risk of dying in less ported the successful treatment of eight ses with iodide of soda in drachm doses. lacobs has treated 1,000 cases with chloride of mercury in half grain doses with a very small mortality. Probably there are sore throat. It was unknown in France until about 1745, when it was brought to Paris by a legion of soldiers from Egypt. no two more effective remedies than suino two the pro-sulphate of soda and brandy Quinine iron and chlorate of potash may be useful but they are not reliable.

All to be diluted with water. A physician is the best prescription and e should visit the patient twice a day. The clothes, and sheets of the patient, are to be boiled in so-la, I drachm to half allon of water. The room before occuation is to be fumigated with sulphur or mercury.

PUBLIC FUNERALS. There is no instance of taking diplathein from a corpse after it was put in a col-in, but there is danger of taking it from the other members of the family who attend. It is occasionally taken while laying out a corpse, but could not be contracted from a cold corpse without diract contact.

The Alliance Greater Than its Leaders. The Farmers' Alliance, as the great A. SHOEMAKER. farmers' organization that is awakening so much alarm in political circles, PHYSICIAN AND SURGEON. ction. It generally flies out during the is infinitely greater than any one or a act of coughing; a particle lodges on the dozen men in it. There is not an individual member enrolled on its list disease, which always concentrates in the of membership, from the president throat. The false membrane is equally down, that would not be given to unpoisonous, and it is probable that all the ex- derstand by evidence most unmistakcretions of the body are capable of giving able that his services is only necessary the disease. If the sputa or spit rags are in so far as his utterances and influthrown out where dogs, swine or sheep enco harmonizes with the demands of

they have set out to reach. Ridicule,

sophistry, abuse or appeal are equally

lanche, and gathering in volume of

A long communication in a recent

tempts to prove that the government

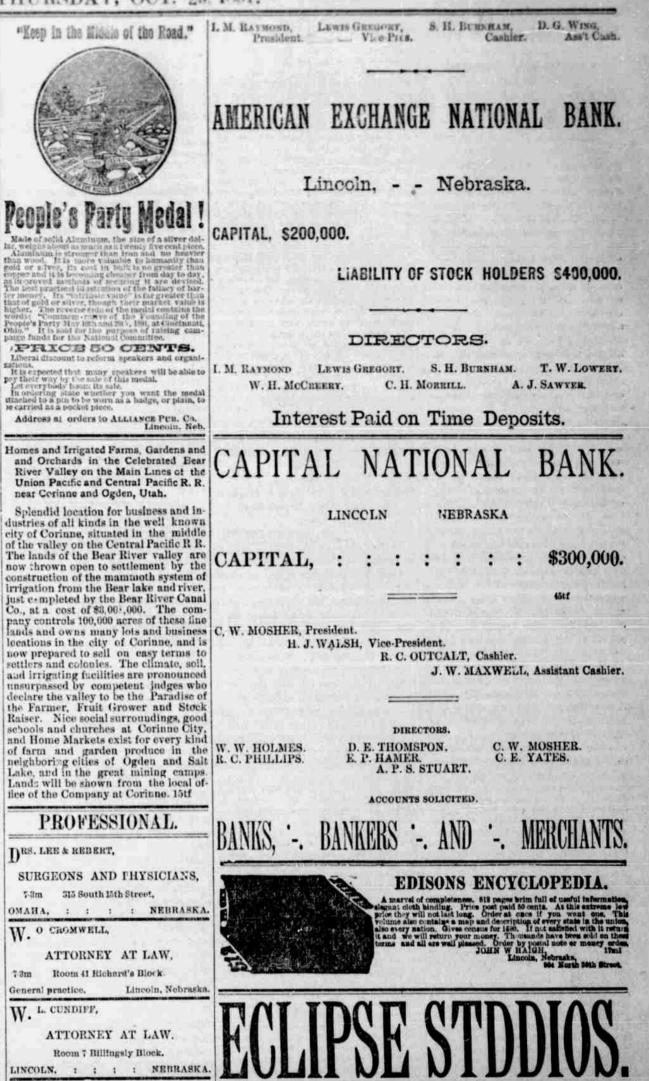
does not lend the national banks (

notes proposed to be advanced on the

collateral under the sub-treasury plan

is not a loan, and if the 1 per cent per

charges on the use of the money in



The Pasteur Institutes.

The Annales de l'Institut Pasteur have just been published, and contain complete statistics of inoculations for 1890. In that year 1,546 patients were treated at the institute. The foreign contingent in 1890 was about one-fifth of the total number, the majority coming from England, Belgium, Greece, and Portugal. However, the spread of the system, and the establishment of similar institutions in many of the large towns of Europe, will decrease the foreign element considerably. Varsovia, Odessa, Lisbon, Milan, Naples. Bucharest, and, in America, New York-all have Pasteur Institutes. The institute at Bucharest has distinguished itself by as striking a victory as that which heralded the Pasteur Institute in Paris. Nineteen Russians were bitten by a mad wolf, 1886; and although a fortnight elapsed between the accident and the treatment sixteen are alive and well to this day. The bite of a wolf is considered as far more dangerous than that of a dog, the mortality being 60 per cent.

From eleven to twelve of these Russians would therefore have perished but for inoculation. A similar occurrence has just taken place at Bukowina. A she-wolf attacked and bit no less than twenty-nine people, who were at once despatched to Bucharest Three died but the rest returned cured to their homes. Out of the 1,546 patients treated in Paris in 1890, eleven after inoculation, giving a mortality of 71 per cent. Out of these six succumbed within a fortnight after inoculation, and five only after a longer period. Experiment proves, it is stated, that if the patient succumbs before a fortnight has elapsed after inoculation it is because the virus has affected the nervous centres, outstripping the antidote-that is, the treatment was too late to be effective. This reduces the mortality to five out of 1,546 or 32 per cent.

The New Bullets.

There is quite a difference of opinion about the humanity of the new style of bullets for military purposes, which are claimed by the German surgeons to be the most humane missiles yet employed in war. The new projectile, candle.

matic telephone to resecure possession matic machines will perform if they fail to make due delivery of the desired sweetment, cigarette, or box of wax vestas .- Iron.

A Paper Hotel.

There seems to be practically no limitation to the uses to which paper can be and is applied. To the long sleeping in a bed at a hotel or on the cars. that the path in which he is to walk list of articles intended for personal use, and in the smaller details of construction of rolling stock, such as wheels, axles, etc., there has been breath or carried in the atmosphere like where any one man or set of men who added a more extensive application to the needs of everyday life by the building of a hotel constructed of spit rags, and the disease took effect in a what he or they have come to grief.

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 fire proof, this desirable end being affected by impregnation with certain chemical solutions.

Artificial Teeth for Horses.

The inventive Yankee is now manufacturing false teeth for horses. A New York veterinary surgeon says that wonderful progress has been made in the art, and anything that can be done in human teeth can be done in horses' teeth. "I heard of a case a few days ago when this new invention was tried with perfect success. The horse's teeth were pulled out one by one, and in the cavities new teeth were inserted. They were literally ce-mented in; and, although the guns were sore for a week, they finally hardened, and now give the animal no Filing horses' teeth and cleanpain ing them are common things now, and in a few years the practice will be gen eral.

Cast-iron Railway Bridges.

Sir John Fowler's report to the directors of the London and Brighton He rock the Railway with reference to their bridges states that the company has 171 cast-iron bridges altogether, and that S1 of these ought within three years to be replaced with wrought-iron or steel structures. He does not state that any of them are unsafe, and coucludes his report by saying "the result of my investigation does not indicate any unusual weakness in the Brighton bridges, which are neither better nor wore than those of similar lines of railways at home and abroad."

Lighting Mixtura.

If a small quantity of chlorate of potash be powdered and mixed with an equal quantity of powdered sugar, an equal quantity of powdered sugar, one of his nostrils. The disease set in, a candle may be lighted by means of extending back into the pharynx and was the mixture without matches. Place

a little of it in the depression around the wick of a candle that has been previously used and then touch the mixture with a glass rod, the end of which has been dipped in oil of vitriol; t will burst into flame, lighting the

The serous fluid in the throat is a deady poison, and the chief source of the inlips, tongue or eye, or on any denuded surface or abrasion, and gives the get them or come in contact with, they the united organization. No man, we take the disease as well as man. In France the women cure the sheep and hogs by swabing out their throats by swabing out t with salt and vinegar. It may be breadth from the course mapped out, taken from a spoon, tumbler, towel or but what he is checked by a reminder after a diphtheria patient, or in the bath is as straight and narrow as the way

tub, but is generally disseminated by to glocy, and the admonstion, "walk coughing at schools and churches or other thou in it." accompanies the rominder. public places. It is rarely given by the There is no instance now recorded measles and smallpox. I saw one woman who had a slight burn on the wrist; she had been washing out his or her own personal ambition, but

spot not larger than a dime, on her wrist. If this is so of those, within the Valleix, one of the most eminent medi- ranks, it is also eminently true of cal men of France, while attending a girl those without, and has been already with sore throat-not a severe case-a lit- foreibly Plustrated. This is one of the with sore throat-hot a set of he had slight fever, and some hours later mony that the Alliance is most thorboth torsils and the uvula were covered oughly organized, and is a unit in with false membrane. Soon afterwards its conception of the evils against there was a profuse discharge of serous which it is contending, and thoroughly secretion from the nose. The cervical in harmony as to the remedies glands and cellular tissue of the neck and necessary to correct existing abuses. infra-maxillary region-were a good deal No outside issues seem to disturb or swollen, delirium supervened, and in for- distract. They have their eyes and ty-eight hours Valleix died without the larnyx being affected. (See Trousscau's clinical lectures, page 497, vol, 11) Dr. Gillet of Paris had performed tracheotomy on a child with croup (diphtheria) which was likely to strangle. In the emergency lanche, and gathering in volume of of the moment he put his lips to the wound and sucked out the blood. He died fortyeight hours afterwards with malignat sore throat, with similar symptoms to those

just narrated. Henry Blache, a young physician of reat promise, sat up three nights, with a shild on which his father performed racheotomy for croup. On the evening of the third day his throat was very sore, and he left immediately to see his father. The swelling about the neck was enormous, lischarge from the nose incessant, and Henry Blache died in seventeen hours. Tronsseau gives an accountal a young

man who had an eruption back of the cars who slept opposite a diplitheria patient. disease in this locality. Another who had a blister on the back of his neck, took it when it first appeared, on the blistered surface, and extended over almost the entire back. Another was the case of a woman confined and delivered with for-ent system. It is admitted that the Three days afterward diphtheria

evulation appeared on one side of the bills, turns them over to the banks passage to the uterus, which was thor-oughly cauterized and supposed to be and guarantees their ultimate redempistered, but three days later it appeared in the pharynx, and she died on the thir-teenth day. Her child had the diplithe from the bank as collateral to secure ria on its head where the skin was the payment of all obligations by the abraded and died the same day, ten hours bank, and as a remuneration charges fter its mother,

M. Herpin, surgeon of Tours, while atthat is not a loan then the treasury tending a patient in the act of coughing, a little diphtheria matter was thrown into annum is not interest the 2 per cent so severe that he did not recover in six months. Dr. Gendron received a little of the the sub-treasury plan is not interest. matter on his lip in a similar manner. The Verily this is making a distinction disease commenced at this point and ex- without a difference. When it comes

tended back through the mouth into the to technical hair splitting it is possible pharynx, and it was only by the most en- that neither is strictly a loan, but, M. Bretonneau gives an account of a boy practically, according to good old ergetic treatment that his life was saved. in 1862, who bathed after a diphtheria pa- farmer horse sense, both are loans.

for succeiving the business men of the coun-try with capable assistants selected from its try with capable assistants selected from its well-15 mee students. Its proprietor has ed-ucated thousands of ambitious young men and women ane placed them on the highroad to success. Complete Business. Shorthand, Type writing and Permanship Courses are taught. For linestrated Catalogue address D. R. LILLIBRIDGE, Pres. Lincolu, Nebr. care not who he is, or what has been his past services, can deviate a hair's

200,000 ARE SINGING FROM THE

Alliance The demand for the little book was so very avy that the publishers have now complet ed a benutifui

MUSIC EDITION evised and enlarged, in superior style, arnished in both paper and board covers, bis is far the largest songster in the market This is a r the largest songster in the market for the price, and the carefully prepared in-dex enables both word and, music editions to be used together. The Music Edition resem-bles in appearance and size Gespel Hymns. More of these books are in use than any other Labor Songster published. The demand is simply wonderfull. With largly increased facilities for publishing, all orders can be filled the same day received, whether by the dozen or thousand. Price, single copy, pa-per 20c; hoard, 25c, post paid. Per dozen, \$2.00 and \$2.50 pcst paid. Word edition, 30 pages 10c. 2-tf Lincoln, Neb. minds steadfastly fixed upon the goal

COL JESSE HARPER Says "The Money Monopoly" is

members as they move, and defeat or utility, the best book now in print-a cyand disaster awaits every issue or clopedia almost priceless.

HON. D. C. DEAVER, of Omaha. Neb., writes to "The FARMFUS' ALLIANCE!" "The Money Monopoly has made many converts here. I give my word and bonor that every man who reads it has become an Independpolicy which impedes their advance. One year ago politicians scorned and ridicaled it; one year hence they will tremble and quake as they are scat-

tered like chaff in the current which The Journal of the Knights of Labor says: The Journal of the Knights of Labor says: 'We hearly recommend "The Money Movo-poly, as it is, without exception, the best ex-position of labor financial principles we have seen. Wonderfully clear and forcible." It's large pages Z Price Soc. 10 for \$1.75. Ad-tress this office or OS. It. B & KEEL, Sidney, In. The nuther will send a sample copy of they holesake price. accompanies it. The cloud is gathering; the storm is approaching. Its bursting will not have been without warning. We are an army of men, every one of which is a leader, and the singleness and oneness of purpose wholetale price quiets discord and smothers jonlousies.



(General Western Agents for the CEAMPION WAGON, The Horses Friend.) JENNING'S ⊨ HOTEL, ALLIANCE BEADQUARTERS. Rates \$2. pur day. Special rates by the week Corner 15th and Jackson Streets,

One block from motor line. 23 E. JENNINGS, Prop'r, D OMAHA : . NEE

We have opened a new Studio at 1222 O street, up stairs and will be pleased to have the citizens of Lincoin call and examine our work. We make a specialty of ARISTOTYPES a new process of Photorraphy, and call your special attention to the fine results we are obtaining. With every dozen Best Cabinets we will present customers with a fine life size portrate! This offer will hold good but a short time to introduce our work, so avail yourselves of this great opportunity. 4217 ECLIPSE STUDIOS, Lincoin, sebraks.

