

OREGON SCOUT.

JONES & CHANCEY, Publishers.

UNION, OREGON.

SCIENCE AND INDUSTRY.

A large number of small tobacco factories are being started in Florida to work up the tobacco grown in the State.

Preliminary arrangements have been entered into to establish a large manufactory in Phoenix, Ari., to make sugar from sorghum.

A good photograph of the seventh moon of Saturn has been obtained by the Messrs. Henry, at the Paris observatory. The photographic plate had to be exposed thirty-five minutes. This moon is known to astronomers as Hyperion, and was the last satellite of Saturn to be discovered.—N. Y. Ledger.

If the statements which come from Brazil on the subject are trustworthy, the Freire system of inoculation against yellow fever certainly seems to be efficacious. The mortality from the disease in Rio de Janeiro is said to be ten times as great among those who have not been treated by Dr. Freire's method as among persons who have been inoculated.—N. Y. Ledger.

The entire annual production of the cordage mills of the United States, it is stated, is about 120,000 tons, valued at about \$24,000,000. Of this, about 40,000 tons is binder twine, and the balance is rope of all sizes, from the largest hawser down to the ordinary manila tarred rope most used by sailors in splicing and repairs.—Public Opinion.

Dr. John Vansant, of the United States marine hospital at St. Louis, claims to be the first to have taken photographs by the light of fireflies. He placed twelve fireflies in a three-ounce bottle, covering its mouth with fine bobinet. The average duration of the flash of each insect was half a second, and the luminous area on the abdomen was about one-eighth of an inch square. The time of exposure was fifty flashes.—Science.

We learn from the Pittsburgh Iron World that Pittsburgh steel-makers have established agencies for the sale of the finer grades of steel suitable for making cutlery in Europe, India and Australia. Their sales have been so considerable as to practically guarantee an established trade. Steel has been sold in competition with English-made steel at the same prices, and the World says, "the prices, under the circumstances, were entirely satisfactory to the producers."

Faye, the French meteorologist, thinks the movement of a tornado is not ascending, as some scientists suppose it to be, but descending, penetrating the lower layers of the atmosphere like a corkerew. The destructive effects of these storms are ascribed to the violent shock occasioned by the collision of the descending spirals with the ground, and the energy is not apparently lessened by this contact, inasmuch as it is constantly renewed from above, and transmitted to the earth by the rotary motion downwards.—N. Y. Ledger.

A French fuel: The plan of utilizing coke dust by making it into briquettes has been successfully adopted by a gas company at Lyons, France. This is accomplished by mixing each ton of fine coke with about 200 pounds of coal-tar pitch and then passing through a compressing machine. The total cost is \$4 per ton, and the product readily sells for \$5.50 to \$6 per ton. The expense for the plant, with a capacity of sixty-five tons daily, was only \$6,000.—Arkansas Traveler.

The barramunda proves to be a connecting link of primary rank between the oldest surviving group of fishes and the lowest air-breathing animals like the frogs and salamanders. It leaves its native streams at night and sets out on a foraging expedition after vegetable food in the neighboring woodlands. It has both lungs and gills. It can breathe either air or water at will, or, if it chooses, the two together. Though covered with scales and most fish-like in outline, it presents points of anatomical resemblance both to salamanders and lizards, and is a connecting bond between the North American mud fish on the one hand and the wonderful lepidosiren on the other.

VERY QUEER LAW.

An Odd Decision Concerning Real Estate Along River Banks.

If a decision just made by the Supreme Court of Connecticut is sound law, real estate on the banks of rivers with a tendency to change the course of their channels is a dangerous investment for capital. The court holds that rivers are natural boundaries, and when they alter their course their functions as boundaries are not affected by their former relations to lands. That no mistake may be made interpreting the meaning of the court, the decision gives a forcible illustration of a possible result from the waywardness of the river. "If," the decision says, "after washing away the intervening lot, it should encroach upon the remoter lots, and should they begin to change its movements in the other direction, gradually restoring what it had taken from the intervening lot, the whole, by law of accretion, would belong to the remoter, but now approximate, lot." Under this statement of the law an owner on the river front is not only liable to see his property gradually disappear under his own eyes, but if it reappears subsequently it belongs, not to him, but to his fortunate next-door neighbor.—Scientific American.

SPENDING OR SAVING.

A Question Which Seriously Affects the Happiness of Every Family.

There is no question that affects so largely a majority of the American people as the one of economy, which means wise spending and wise saving. The model housekeeper or house-mother of to-day should be an object-lesson to be held up for study before the town in which she lives. The woman who is cultured, educated, refined and yet enjoys domestic life and knows how to care for the money brought into the home by the husband and how to use it wisely and well for the comfort of her family is as much of a missionary as though she were teaching the Hottentots civilization.

The cost of living is becoming a serious affair with the majority of people, and is often double what it ought to be with but half the comfort. We have sometimes thought that the subject of domestic economy ought to be taught in the higher grades of our city schools and in all the country schools of our own land. If we had that teaching in our own hands, we would commence with making an effort to eradicate the almost universal feeling of shame which seems to be felt in every mind when using the word "economy." If it could be made a public sentiment that it were disgraceful not to use, as well as practice it, half the battle would be fought.

As it is, every one wants what they see others have, and families with small incomes of five hundred dollars feel defrauded of their rights if they can't live in the same style as the family with twice the resources. The husband and father works at his trade, or on a salary, from ten to fourteen hours a day, bringing in the money, the wife and daughters and sons work as many hours each day getting rid of what the head of the house brings in, and to what purpose? To make as much of a display as some other family that is trying to copy some one else, and so on and on. Mrs. A has a new silk. Immediately Mrs. B, Mrs. C and Mrs. D must have one. Mrs. B has a new carpet for her parlor. Instantly Mrs. A, Mrs. C and Mrs. D feel the need of a new carpet as never before. Miss A has a new piano. The keys rattle and the piano is "dreadfully out of tune" in the homes of Miss B, Miss C and Miss D. Jack A has a pony or a new dog-cart, and there is no end to the tearing until John B, Dick C and Ned D all have ponies or dog-carts. And this goes on clear down to the unsavory matters of daily life, and every one is just as full of unrest and dissatisfaction as they were before the purchase of the coveted goods.

Let one woman with intelligence, grace and superior advantages go into a community filled with A's, B's, C's and D's, and live on a higher plane, caring never to copy her neighbors, and these people get an idea they never before enjoyed. Let this woman talk economy, practice it and feel really glad and proud she can, and how the taste of that whole neighborhood will change! I know three wealthy women in a city who years ago promised each other to dress for five years on fifty dollars a year. The good influence that resulted from that act has never died out. I know wealthy women who talk economy and practice it simply for the sake of others. God bless such women! A woman who has fifty dollars a month to spend and gives away the lion's share, spending very little for selfish purpose, is a woman whose life does not end at death. What we wear and what we eat need be but a small part of our living, and yet we are making it by far the larger part.—Cor. Atlanta Constitution.

Study and Health.

Miss Lucie Hall, doctor at Vassar College, on going into the question of hygienic influence of hard study on women, with regard to the remarkable diminution of large families in America, has come to the following conclusions, which deserve to be examined: One hundred and seventy-six families proved on examination to have only an average of from three to two children. Now, out of those families those who had the largest number of children were found to have highly-educated mothers, not to say educated above the average. Dr. Hall's experience has proved to her that the health of the young people is particularly good, and even improves as the studies increase. She cites the following words of M. Bassom, Director of the Wisconsin University: "The health of our young people in no wise diminishes whilst with us; on the contrary, I have long since noticed that a young lady who gives up society and takes up reasonably with study at the university is in far better condition, as far as health is concerned, than the majority of her sex."—Chicago Tribune.

The great banyan tree in the Botanic garden at Calcutta, which is now about one hundred years old, has a parent trunk forty-two feet in circumference, and two hundred and thirty-two aerial trunks, or root-drops, from a few inches to a foot around. The vast leafy crown has a circumference of eight hundred and fifty-seven feet. A still larger banyan grows near the hill fort of Wyszatg, in the Bombay presidency. The circumference of its head in 1882 was fifteen hundred and eighty-seven feet. The banyan usually begins its life by growing upon the surface of some other plant, as, for example, the wild date, which it strangles as it increases in size.—N. Y. Ledger.

QUEER PHENOMENA.

Some Curious and Unexplained Antics of the Camera.

Though not yet arrived at the dignity of being an amateur photographer, I have provided myself with an elaborate outfit, and have practiced a good deal in order to have the means of securing better pictures of interesting places and people, when traveling in out-of-the-way portions of the globe, than I could get with a pencil only. Three times during the course of my practice in exposing and developing dry plates I have made negatives that startled me, for, if not supernatural, they at least bordered very closely upon the miraculous. Twice within the last month I have endeavored to photograph a handsome collie dog, the household pet of a friend whom I was visiting.

In order to bring the dog more conspicuously in the field of vision I placed him upon a rustic seat on the lawn and, when a restful moment on his part arrived, exposed the plate. On the ground glass of the camera the scene was perfect, the dog's body reaching from one arm to the other of the bench, where he stood motionless during the exposure, which did not exceed half a second of time. On development I had, indeed, a complete picture of the bench and of the landscape, but no sign what ever of the dog, not even a haziness as if he might have moved during the exposure. The plate used was a No. 30 Cramer, size 5x8, with a Wides lens of most excellent quality. There were several people present at the time observing the operation or engaging the attention of the dog to keep him quiet. All could, with the clearest conscience, make legal affidavit that they saw the dog on the bench all the time, and yet there is not the slightest trace of him to be found on the plate. Every portion of the bench is distinctly visible, notwithstanding that the dog's body intervened between it and the camera. While taking the plate-holder into the house to develop the picture I accidentally moved the slide a little so that the very sensitive plate is much fogged, but I did not think it had been opened far enough to allow the dog to escape entirely. Again, a few days later, I had absolutely the same experience in photographing the very same dog upon the same bench. The bench was completely delineated, but the dog gave no evidence of having been present.

During last winter, while at York Factory, on Hudson Bay, my hosts of the Hudson Bay Company were very much interested in my camera, and submitted themselves readily to the scrutiny of my portrait lens. One Sunday, just before my departure for Fort Churchill, I attempted to photograph the pretty little daughter of the master of the factory. The child's mother, a strict Scotch Presbyterian, did not hesitate to express her disapproval of doing such work on the Sabbath. The father, however, prevailed upon the mother to give her consent, as I was going away the next day, and they were very anxious to avail themselves of a privilege so unusual in that part of the world to secure a portrait of the little family idol. The child was posed, standing upon the seat of an old-fashioned, high-back chair, stuffed and quilted and with black buttons to hide the stitches that denoted the hair-cloth covering. When all was ready and the child stood motionless, leaning against the padded back of the chair, I made the exposure and waited until night came to develop the plate, perfectly confident that I had secured a good portrait at last. When the image came upon the plate, under the action of the pyrogallic developer, there was a perfect picture of the chair, every button, and, apparently, every hair of the covering being distinctly drawn, but no more sign of the child than if she had been made of thin air. I was greatly mystified, but the father was awe-stricken as well as disappointed by the result, and whispered in an impressive but husky voice: "The good wife said no good would come of photographing on Sunday, and she was right. I am glad it is only the picture that is lost."—W. H. Under, in N. Y. World.

Creatures of Yesterday.

With all his pride at our progress, the thoughtful student beholds with dismay the rapid sweeping away of many animal and vegetable species which to future science would be most precious. In his biological address to the British Association, Prof. A. Newton lamented, as an example of what is being done, the disappearance of the birds of New Zealand. In the more thickly settled districts, imported species alone are now to be seen, while the natives are fast being pushed inland and must soon vanish. These native species are almost exclusively peculiar to that country and supply a link to the past that once lost can never be recovered. The forms of life that are being killed off are mostly the ancient ones, that must teach us more than the recent ones of the way life has been spread over the globe, and Prof. Newton therefore urges haste in gaining all possible knowledge of these creatures before they have passed away.—Arkansas Traveler.

A resident of Hartford, Conn., is the inventor of a novel apparatus for drying hats. A box with three hands—minute, second and quarter second—is started by the official timer. When the spinning horse touches the wire the clock is stopped by electricity. At the same instant the current opens a camera, which photographs the horse and the clock-face.

CHANGE OF PASTURE.

Why It Benefits Not Only Live Stock But the Soil Also.

There is more good solid sense expressed in the old saying that "A change of pasture makes fat calves" than most people are apt to realize on a casual reading. Not only calves, but all descriptions of live-stock need for their highest thrift some little variety in the way of food, and the pastures, to maintain their best condition, need an occasional rest. Both stock and pastures are therefore benefited by a change. The stock coming into a fresh pasture find every variety of grass natural to it in full growth, and are able to fill themselves easily without too much exertion; and if the animals are of improved character and quality they never fail to give a good account of the luxuriant feed. There are some grasses in the pasture which will not stand very close grazing; the sun let in too directly upon their roots acts unfavorably and they seem incapable of making much growth until after they have progressed to about a certain stage. If constantly grazed the pasture is certain to lose its due proportion of such grasses. It is better, therefore, for both stock and grass that the pastures be divided into several lots, that one portion may recuperate while another is being used. If there is a difference in its productive capacity—some portions growing more luxuriant food than others—it is well to make the divisions with reference to that fact, for if there is not profitable food on any portion it is better that the stock should not be suffered to tramp around over it. Suitable divisions of the pastures also enable the farmer to keep different descriptions of stock separate, which is quite desirable. Especially in periods of drought it is essential that the farmer should be able to manage the pastures with the greatest care and intelligence, for there is danger of the permanent stand being injured in such portions as are too heavily burdened with stock at such a time.—Breeder's Gazette.

FOR THE NURSERY.

Allow Your Children to Develop Slowly and Naturally.

There is nothing more dangerous than the way some people try to stimulate the dormant intellect of infant children, often playing with the helpless baby and tossing it up till it trembles with excitement. Babies, like all little animals, should be left in a passive state. The most dangerous brain diseases to which infants are peculiarly subject are brought on by overfond parents, who refuse to let the faculties of the child remain in a half dormant state, as they should during the first year of life.

A nervous woman is a dangerous mother. It is better for an over-anxious woman to put her child in the hands of a conscientious nurse, who will bring it up by system and not by "maternal impulse," a beautiful thing for poets to dwell upon but a very uncertain thing in actual practice. No intelligent person would allow a choice puppy or fancy Angora kitten to be dangled and doted as little children are by over-anxious mothers.

It seems very strange that sensible people should refuse to use their reason in bringing up babies. The child should be fed systematically, only at stated hours, every day it should be bathed at the same hour so that its long midday nap shall come at such a time that it shall have a period of wakefulness before sundown. Healthy children will sleep from sundown till sunrise, waking only once during the night to be fed if they are taken care of systematically. Infants under six months old should be fed every two hours from sunrise till sundown. Old wives' tales and old mothers' remedies are the most dangerous jack-o'-lanterns that the young mothers can follow.—N. Y. Tribune.

PERMANENT INKS.

Why Manufacturers Should State the Composition of Their Goods.

Ink-making has now become quite a high chemical art, and there so many kinds of ink in the market that a choice is rather puzzling. It is very desirable that manufacturers should state the composition of their inks—i. e., of the coloring matter which they contain. This might be done without betraying any trade secrets. We could then choose our ink according to its purpose. For documents of a permanent character, and subject to the possibility of intentional obliteration, the ink should contain more than one kind of coloring matter; as, for example, the old tannogallate of iron plus indigo or aniline black, and perhaps a little copper salt. No single chemical agent could bleach all of these, and neither paper nor parchment can stand a series of chemical solvents. The aniline inks, now largely used, are of very questionable durability. It is uncertain whether they can endure the action of time alone. Supplemented with the old-fashioned iron salt, which has proved its durability, they are safe. It should always be understood that the indelibility of any ink largely depends upon the nature of the surface to which it is applied. The more absorbent the paper, the more difficult is its removal, and it penetrates below the surface of such paper. If the paper is highly glazed, by covering it with any kind of varnishing material, the possibility of removing the whole surface, varnish, ink and all, is increased.—Christian at Work.

It is said to take three days of good food to make up for one of bad food.

GUNNING FOR PICTURES.

An Interesting Invention With Widespread Promises.

Amateur photography has made another long stride forward. A new invention was displayed at the meeting of the New York society, whose widespread results can scarcely be conjectured. By means of it photographs will henceforth be taken as easily and accurately at night as in the daytime, and the photographer will, in the blackest darkness, be able to literally take an unerring shot at his subject with a photographing gun.

Hitherto the only means of photographing at night have been by the means of the kerosene, calcium or electric lights. All of these demanded more or less paraphernalia and were not portable to any available degree. Magnesium wire, when burned, was known to produce a light of strong actinic quality, and a lamp has been devised with which to burn it for photographic purposes. It was not a satisfactory light, however, as it was unsteady and liable to go out. From magnesium, however, Dr. H. G. Piffard has devised exactly the thing desired.

It consists in powdered magnesium spread upon gun-cotton. The ignition of the gun-cotton furnishes the heat necessary to set fire to the magnesium and the result is a brilliant flash, powerful enough to sufficiently expose the plate and easily available under any circumstances. The photograph is instantaneous. The doctor first discussed a German powder invented for the purpose, stating that while its light effects were excellent its very explosive quality made it a dangerous article either to handle or have about. He next discussed and exhibited a mixture of four parts of gunpowder and one part of magnesium, which, when flashed, answered the purpose desired. It was neither as convenient nor effective, however, as the gun-cotton combination. After burning samples of these and showing their effects, he fired a cartridge of magnesium and gunpowder from an ordinary revolver, showing that the flash was quite sufficient for an instantaneous photograph. He then proceeded to darken the room and to photograph Mr. Robert Roosevelt. The camera was adjusted, and as the cap was removed the doctor touched a match to a small piece of powdered cotton. The light flashed in the darkness, and when some minutes later the developed plate appeared, an excellent negative of Mr. Roosevelt was the result. Several portraits, taken the night before, were exhibited, and the practical value of the invention was indisputably established.

The result will be that the amateur photographer will henceforth go gunning in the darkness and lay out on a plate every thing he may choose to shoot at. The camera will be fitted to a pistol barrel or the pistol barrel to the camera, and cocking the weapon will expose the plate. As soon as the weapon is aimed the flash from the muzzle will instantly serve to photograph the object, and the game will be securely bagged in a moment. The doing thief, the expression of a man who treads upon the unforeseen carpet sack, as well as that of the husband out late who is trying to assume an expression of indifferent sobriety before the lights of the domestic gas, will now adorn the albums, where they have hitherto been unknown. The invention is valuable commercially, one photographer stating that he had concluded to make use of it in his gallery as soon as the winter sunlight began to weaken early in the afternoon. It will also greatly widen the fields of amusement and experiment which have attracted so many thousands to amateur photography.—N. Y. Times.

Outwitting a Detective.

One of the brightest detectives at police headquarters is the subject of a joke. He recently was out looking for a well-known "crook," and one of the toughest young men in Buffalo. The officer spotted his game on Front avenue, and started towards him. The latter "tumbled," very quickly and made off, turning down Fifth street on a run. The detective gave chase and the crook was getting so hot that the crook bolted into a saloon. A pail of water was standing on the floor of the barroom, and quick as a flash the pursued threw down his hat and began washing his face in it. In an instant the detective burst in, asking: "Did a man run in here just now?" "Yes," answered the crook, vigorously rubbing his face. "Just went out the back door." The detective took the bait and went through the rear exit on a gallop, while Mr. Crook was out of reach.—Buffalo Courier.

"You never drink or smoke, do you, George, dear?" she said. "You know I could never marry a man who drinks and smokes." George, in a broken-hearted tone of voice, admitted that he did smoke and drink a little, and turned to go. But a pair of white, twenty-seven-year-old arms were around his neck in a moment. "Never mind, George," said the girl; "perhaps my wifely influence will induce you to give them up."—N. Y. Sun.

Customer (in restaurant)—"What is the matter with the cheese, waiter? It looks as if it might have been used to bait a rat-trap." Waiter—"You has got dat cheese turned upside down, sah. Dat's de side what's tumbled to be up. Now dat cheese am all right, sah?"—Pack.

"Do crocodiles keep cattle, pa?" asked little Johnny McWilliam. "No, my son; why do you ask?" "Because I heard ma say something about crocodile's steers."—Pittsburgh Chronicle-Telegraph.

TAKEN FROM LIFE.

An Instructive Conversation Overheard in a Photograph Gallery.

"Do I look all right, Mame?"
"Yes; splendid."
"I just know I'll laugh right out."
"No, you mustn't; that would spoil every thing."

"O, I think it horrid to have one's photo taken. I'd rather have a tooth pulled any day."
"So would I."
"I never do take a good picture."
"Nor I; mine are horrid always."
"If these are not good I'll never sit again. How does my hair look?"

"Ever so nice."
"I'm so nervous. I just know I'll spoil every thing."
"No; you mustn't; you'd just have to sit again."
"Don't you dare to look at me, Mame, or I'll giggle right out."
"O, I'm going to get behind the screen and point my finger at you all the time."

"O, if you do!"
"See if I don't."
"You shan't even stay in the room."
"I will too. It'll be such fun."
"O, you mean thing! Do you think this dress will take well?"
"Yes, indeed."

"I do hope the jet trimmings will show well. I can't decide what position to assume."
"I'd have a side view."
"Would you? But I'm so long-faced."
"No, you're not."
"O, but I am; and—oh, they're ready for me. I dread it so."
"Pshaw! I wouldn't mind it a bit."
"Yes, you would. Now don't you dare look at me."

"I will too."
"Mame!"
"O, I will!"
"I'll laugh right out, sure."
And she does. She spoils two or three plates by "giggling right out," and she goes away declaring that she "just knows" she'll look "too perfectly awful for any thing in the picture."

It is living through such scenes as these daily that causes photographers to have a worn and faded look, and makes them old before their time. Many of them break down under the strain and die young.—Detroit Free Press.

EARNS FOR HORSES.

Where and How They Should Be Constructed and Arranged.

Horse stables should be located on land that is high enough so it can be well drained, the surface water carried off rapidly. Stagnant water is very injurious to horses, especially when it is filled with the refuse matter from the stable. Damp, badly ventilated stables are a fruitful source of disease, causing fevers, coughs and trouble with the eyes, also such affections of the legs as scratches, grease heel, etc. Dampness is especially liable to cause inflammation of the throat and lungs. In such stables good grooming and the best of care will not ward off disease, but many ailments may be expected to make their appearance.

Having selected a good location for the horse barn, it should be arranged and built in such a way as to secure the most comfort for its occupants and convenience for those who have the care of them. As sunshine and pure air are so essential to the good health of horses, the barn should, if possible, be so located as to have a southern exposure, and in this way get the full benefit of the sun.

Ventilation is a most important consideration in the building of barns, and special pains should be taken to secure the ingress of pure air and the escape of the foul air, caused by the ammonia that arises from the manure. This is necessary in order to secure good health. In arranging a stable for horses several box-stalls should be provided, as these will be found specially useful for mares at foaling time, for the care of sick or lame horses, and also for keeping valuable horses in during the winter. In these there is an opportunity for exercise to be taken when the weather is such that horses can not be turned out in a lot, or driven on the road. A well-fenced lot adjoining the stable, with an open shed in it, will be found very convenient, as horses that are not in use can be turned out for exercise in it when the weather is not too inclement.—National Live-Stock Journal.

He Felt Reassured.

"Have you seen papa's new dog, Carlo?" she asked, as they sat in the parlor.
"Yes," he replied, uneasily. "I have had the pleasure of meeting the dog."
"Isn't he splendid? He is so affectionate."

"I noticed that he was very demonstrative," returned he, as he moved uneasily in his chair.
"He is very playful, too. I never saw a more playful animal in my life."
"I am glad to hear you say that."
"Why?"

"Because I was a little bit afraid that when he bit that piece out of me the other evening he was in earnest. But if he was only in play of course it's all right. I can take him as well as anybody."—Merchant Traveler.

"My house was entered by a burglar last night." "Is that so?" "What did you do?" "Nothing but look at him." "Did he carry off any thing?" "No; he saw that there was only wood stores in the house and not a particle of coal on the premises, so he went away."—Newark State Journal.

A brand of blasting powder is marked "L. E.," and the marking probably has the same meaning as in music—very loud.