THE LEBANON EXPRES

VOL. III. LEBANON, OREGON, FRIDAY, NOVEMBER 22, 1889. NO.

SOCIETY NOTICES.

LEBANON LODGE, NO. 44, A. F. & A. M.: Meets at their new hall in Masonic Block, on Saturday evening, on or before the full moon.
J WASSON, W. M.

LEBANON LODGE, NO. 47, I. O. O. F.: Meets Saturday evening of each week, at Odd Fellow's Hall, Main street; visiting brethren cordially invited to attend. J. J. CHARLTON, N. G.

HONOR LODGE NO. 38, A. O. U. W., Lebanon, Oregon: Meets every first and third Thursday evenings in the month. F. H. ROSCOE, M. W.

RELIGIOUS NOTICES.

M. E. CHURCH.

Walton Skipworth, pastor—Services each Sunday at 11 A. M. and 7 P. M. Sunday School at 10 A. M. each Sunday.

PRESBYTERIAN CHURCH.

G. W. Gibony, pastor—Services each Sunday at 11 A. M. Sunday School 10 A. M. Services each Sunday night.

CUMBERLAND PRESBYTERIAN CHURCH.

J. R. Kirkpatrick, pastor—Services the 2nd and 4th Sundays at 11 A. M. and 7 P. M. Sunday School each Sunday at 10 A. M.

COUNTING BY ELECTRICITY.

Interesting Machine to Be Used in the Forthcoming Census.

We have on more than one occasion published a note on the complicated electrical appliances which have been manufactured to be used in taking the forthcoming census. We now give a brief description of the process:

The census collector will call with his printed blank, and answers to questions will be written in the usual way. These sheets will then be placed before a person who operates a machine which may be likened to a typewriter, except that instead of the usual ink marks on paper, small round holes are punched in a card. The cards, one for each person, are about six and a half inches in length by three inches in width, and the particular position of hole in a card indicates an answer to some of the questions in the printed blank.

As many as 250 items of information can be punched out upon a card, although no one card would ever have more than one-tenth part of the whole number. For example, no one person can be classed as both white and black, American and foreign born, and if foreign born he can only come from one country. These cards, when punched, are placed one at a time in a sort of press, and a lever operated by one hand is brought down, when a series of pins are brought against the card. Whenever a hole has been punched in a card, the corresponding pin passes through into a mercury cup beneath, completing an electric circuit. These circuits, one for every hole, pass out to a large number of counters which operate electrically, and which add upon their dials all items of the same kind upon the same dials. For instance, all white men are counted upon a dial marked "white males;" all business or professional people upon dials which indicate their particular business or profession. The cards, as they leave the press, are all sorted by means of an electrical sorting device, whereby they may be sorted into groups of States.—Modern Light and Heat.

TO PREVENT CONSUMPTION.

The Latest Medical Views Concerning Tubercular Diseases.

Medical views of consumption have greatly changed within the last few years. It was once regarded as incurable; it is now regarded as curable, if the right treatment is begun early.

It was once regarded as specially transmissible; so much so that children of consumptive parents often looked on themselves as doomed—a feeling which of itself did much to induce the dreaded result. Now the disease itself is not believed to be transmitted, but only a condition of special susceptibility to the disease, a susceptibity which may be overcome or guarded against by proper precautions.

Consumption was formerly looked upon as incommunicable. It is now believed to belong to the great class of infectious diseases caused by microbes. The discovery of the microbe—the tubercle bacilus—was made by Koch in 1882, and has been confirmed by numerous original investigations conducted by other experts.

Tests on animals prove that this microbe communicates tubercular disease when introduced into their systems; and that the result, fatal or otherwise, depends mainly or wholly upon whether the animals are closely confined amid bad surroundings, or are allowed free exercise in the open air.

As to the curability of the disease, post-mortem examinations at the New York hospitals constantly show that large numbers of persons who have once been consumptive have fully recovered, and have died long afterward of other diseases.

In consequence of these near views, the question of prevention has become extremely important. But to know how to prevent consumption, we must know how it is propagated.

Typhoid fever, the seat of which is in the walls of the intestines, is propagated mainly by the microbes in the discharges, which later find their way into the intestines again through infected drinking water.

Consumption, on the other hand, having its special seat in the lungs, is mainly propagated by microbes contained in the expectorations.

The microbes are harmless so long as they are in a fluid state, but when allowed to dry, they are taken up in the air as dust and inhaled.

This infected duct may lodge on the walls of the room, and communicate the disease to tenants of the house. It has been scraped off with a sponge, and animals inoculated with it have become tuberculous; while animals inoculated with scrapings from uninfected rooms showed no signs of the disease.

To prevent consumption, therefore—

1. Observe all the conditions of vigorous health. Most kinds of microbes are powerless against high health.

2. Have all sick rooms thoroughly ventilated. It requires many microbes to infect. Ventilation greatly reduces the danger.

3. Let the expectorations be invariably received in spit-cups, and carefully disinfected.

But consumption may be communicated by the milk of consumptive cows: Therefore, let all milk be boiled. This destroys the various kinds of microbes, and should be made a permanent habit as a guard against all infectious diseases.—Youth's Companion.

Their Various Forms and the Difference in Their Construction.

The expression electric brake is now often heard and requires a word of explanation. There are various forms of so-called electric brakes which are practicable and even efficient working devices. In none of them, however, does electricity furnish the power by which the brakes are applied; it merely puts in operation some other power. In one type of electric brake the active braking force is taken from an axle of each car. A small friction drum is made fast to the axle. Another friction drum hung from the body of the car swings near the axle. If, when the car is in motion, these drums are brought in contact, that one which hangs from the car takes motion from the other and may be made to wind a chain on its shaft. Winding in this chain pulls on the brake levers precisely as if it had been wound on the shaft of the handbrake.

The sole function of electricity in this form of brake is to bring the friction-drums together. In a French brake which has been used experimentally for some years with much success, an electric current, controlled by the engine-driver, energizes an electro-magnet which forms part of the swinging-frame in which the loose friction-pulley is carried. This electro-magnet being vitalized, is attracted toward the axle, thus bringing the friction-drums in contact. In an American brake lately exhibited on a long freight train, a smaller electro-magnet is used, but the same end is accomplished by multiplying the power by the intervention of a lever and wheel. The other type of so-called electric brake is that in which the motive power is compressed air, and the function of the electric device is simply to manipulate the valves under each car, by which the air is let into the brake-cylinder or allowed to escape, thus putting on or releasing the brakes. All of these devices have this advantage, that, whatever the length of the train, the application of the brakes is simultaneous on all the wheels, and stops can be made from high speed with little shock.—Scribner's Magazine.

THE CREDIT SYSTEM.

Responsibilities of Bank Managers to the Public at Large.

There are times when it is well for the managers of banking institutions to realize their responsibilities toward the public as well as to their stockholders. It is particularly so when a general scrutiny of credits is going on and when a wide-spread feeling of uneasiness prevails. The banks have it in their power to force a general liquidation upon the community at any time when it may seem good to them to do so, but in so doing they would themselves be the first to suffer, for their only hope of profit lies in the retention of customers who are doing a profitable business and, therefore, able to pay for the use of money. The vast development of commerce in the latter years of this century has been largely due to an intelligent use of the credit system. If every transaction was compelled to be an actual transfer of cash from hand to hand, the condition of the civilized portion of the world would be pitiful in the extreme. All the fine tools which commerce now uses would be reduced to worthless heaps of junk, and the inhabitants of the large cities would be compelled to rush to the country for food, each family becoming a self-supporting atom in the mass of humanity. Money is merely a method for facilitating exchanges between men and communities, and it must be employed according to certain well-known rules or it ceases to have any value. The mere possession of wealth without knowing how to use it renders any one an absurd figure, and a bank which has a million gold dollars in its vaults without the managers to direct its scattering abroad in the shape of loans, might just as well have its safe full of pebbles. Loan the bank must, and loan to the uttermost; the duty of the directors consists simply in passing on the merits of individual credits. A borrower who is conducting an honorable and profitable business is not merely entitled to credit, he must be encouraged in its legitimate use if the community would prosper; he must learn to extend it in every direction that is open to its products.—Providence Journal.

PALACE OF WOODS.

One of the Most Instructive Features of the Paris Exposition.

Not the most showy, but certainly one of the most interesting, features of the present exhibition at Paris is the Palais des Bois et Forets—palace of woods and forests—a large building with spacious *salons*, galleries and balconies, built entirely of wood, in undressed logs, sticks and fagots, yet none the less very tastefully constructed, and not without considerable architectural beauty. The walls and ceilings are paneled with various sticks of the wood, showing different colored barks—birch, beech, elm, pine, poplar, for example, producing pretty artistic effects.

Every kind of tree and shrub which grows in France, or in any of her colonies, is here conspicuously represented. If a parent, or teacher, desired to give his children a few days of most effective and pleasant instruction in trees and woods, here is the ideal place. For the entire structure appears to have been arranged for the especial purpose of giving lessons in tree-botany.

The columns, beams and posts are each of a single log; and in every case the common name of the tree, together with its botanical name and the age of the specimen, are given on a tag attached to it. Moreover, there are specimens of the leaf, the flower, the seed, cone, or nut, easily accessible for examination; and examples of all the known parasites; insects and borers which infest and live upon it.

The different sizes to which the tree attains, at different ages, are illustrated by specimen sticks and logs. The forms of the branches and twigs are shown by numerous examples.

Next follow the uses to which the tree is put, as timber, or in manufactures, and the grain and fiber of the wood are exhibited, along with the tools best adapted for working it. Products from the fiber and the wood pulp, as seen in paper, or vegetable silk, linen, etc., are exhibited; also the extracts from the sap, the gums and resins which naturally exude from the tree, and the alkaloids which may be prepared from them, for medical uses.

Then follows the gnarls and excrescences which sometimes grow abnormally, on each species of tree, and such examples as have been found of petrifactions of the wood.

Finally they are given examples of the kind of soil in which the tree flourishes best, and the geological or rock formation upon which it is found growing.

In a word, the palace of woods might very aptly be termed a palace for easy and agreeable botanical instruction.—Youth's Companion.

THE EMPEROR NERO.

The Trouble He Took to Keep His Voice Soft and Sweet.

A useful example of the proper care of the voice is to be found in a very unexpected quarter. The Emperor Nero, as is well known, believed himself to be a great artist, a notion of which those about him were not likely to disabuse him. His dying words, "Qualis artifex pereo!" show that he had at least one feature of the artistic temperament. He sought fame by many paths, in poetry, fiddling, driving and other branches of the fine arts to say nothing of his scientific experiments on the bodies of his nearest relations. The imperial virtuoso was particularly vain of his voice, which I can well imagine to have been soft and sweet, qualities which often enough accompany a cruel nature. He was proportionately careful of so precious a possession. His system is worth quoting. In addition to his general measures as attending to his liver, and abstaining from such fruits and other foods as he fancied to be injurious to his voice, we are told that at night he used to lie on his back with a small plate of lead on his stomach. This was probably for the purpose of checking the tendency to abdominal breathing, which has already been referred to as perfect way in respiration for s[illegible] In order to spare his voice all [illegible] essary fatigue he gave up haran[illegible] his troops and ceased even to ad[illegible] the Senate. As in later times t[illegible] were keepers of the king's conscie[illegible] Nero gave his voice into the keepi[illegible] of a phonascus. He spoke only in th[illegible] presence of this vocal director, whose duty it was to warn him when his tones became too loud or when he seemed to be in danger of straining his voice. To the same functionary was intrusted the formidable duty of checking the Emperor's eloquence when it became too impetuous. This he did by covering the imperial orator's mouth with a napkin. It must have needed no small measure of courage to apply this effectual method of "closure" to the arch-tyrant of history when intoxicated with the exuberance of his own vocalizations—Contemporary Review.

—A Kingston woman is the owner of a pet cat which formed the habit of sleeping in a coal scuttle. One day some one threw a piece of paper in the scuttle, covering the cat from sight. The woman picked up the scuttle to throw coal in the stove and dumped the cat on the red coals. There was an unearthly yowl, and a flaming body went flying through the room. A pail of water extinguished the fire and saved the feline.

POPULAR FALLACIES.

Errors and Delusions in Which Many Persons Are Believers.

A very common error is to suppose that birds sleep with the head beneath the wing. No bird ever sleeps so; the head is turned round and laid upon the back, where it is often concealed by feathers.

That dogs are kept in health by the addition of brimstone to their drinking water. Seeing that stone brimstone is utterly insoluble in water, I fail to perceive what possible use it can be to the dog.

That cows are fond of buttercups. Cows, as well as horses, in grazing, carefully avoid these plants, which, like all the *Ranunculaceæ*, are harsh, astringent and somewhat poisonous.

That washing the face in morning dew improves the complexion. Dew is distilled water; but, being very pure water, it can not exercise any special influence on the skin. I am unwilling, however, to dispel this pleasing illusion, and say: "By all means, young ladies, wash your faces in the morning dew, in full belief of its efficacy. To do so you must rise early and breathe the pure morning air; this will benefit your health and no doubt improve your complexion at the same time." This is undoubtedly the lesson intended to be inculcated.

That a fire is extinguished by the sun shining on it. The effect in this case is apparent, not real. A fairly good fire looks little better than a heap of white ashes under the powerful light of the sun's rays.

That there is economy in putting fire-bricks or clay-balls into a fire. Considering that whatever heat they give out is derived from the fire itself, and that, being themselves utterly incombustible, they contribute nothing to the heat of the fire, there can be no economy in their use. Our method of using fuel is, however, terribly wasteful; a very large percentage of combustible matter, as well as heat goes up the flue and is wasted.

The pipes are burst by a sudden thaw. The thaw merely finds out the bursting that has already been effected by the frost. It is the expansion of water when passing into the icy state that bursts water-pipes of whatever material.

That the bones are brittle in frosty weather. No doubt more bones are broken in winter than in summer, but this is due to the slippery state of the roads at that season, not to speak of accidents on the ice, and not to any abnormal condition of our bones.

That "thunderbolts" are tangible realities that can be handled and preserved as curiosities. The thunderbolt is the flash of lightning, often no doubt very destructive, but never accompanied by any solid. The only solid bodies that ever fall to the earth from the sky are aerolites or bolides, bodies coming from outer space and having nothing to do with thunderstorms.

That mirrors attract lightning and should be covered or turned to the wall during a thunderstorm. This is a pure illusion arising from the fact that mirror reflect the lightning flash and thus add to the terror and apparent danger of the storm.—London Public Opinion.