

# LAWRENCE BROS.

—Are now open, and have on hand—

## GROCERIES & PROVISIONS

### Flour and Feed!

## DRY GOODS, NOTIONS,

### Clothing and Furnishing Goods!

## HATS AND CAPS.

## CONCRETE STORE. Cooperstown, Dak.

### Minneapolis & St. Louis RAILWAY,

### AND THE FAMOUS Albert Lea Route.

### TWO THROUGH TRAINS DAILY FROM ST. PAUL AND MINNEAPOLIS TO CHICAGO

Without change, connecting with the Fast Trains of all lines for the

### EAST AND SOUTHEAST!

The Direct and only Line running through cars between MINNEAPOLIS and

### DES MOINES, IOWA,

Via Albert Lea and Fort Dodge.

### SOLID THROUGH TRAINS

BETWEEN MINNEAPOLIS AND ST. LOUIS and the Principal Cities of the Mississippi Valley connecting in the Union Depot for all point less South and Southwest!

**MANY HOURS SAVED!** and the Only Line running Two Trains Daily Kansas City, Leavenworth and Atchison making connections with the Union Pacific and Atchison, Topeka & Santa Fe Railways.

Close Connections made in Union Depo with all trains of the St. Paul, Minneapolis & Manitoba, Northern Pacific, St. Paul & Duluth Rail ways, from and to all points North and Northwest REMEMBER! The Trains of the Minneapolis & St. Louis Railway are composed of Comfortable Day Coaches, MAGNIFICENT PULLMAN SLEEPING CARS, and our justly CELEBRATED Palace Dining Cars!

150 Lbs. of Baggage Checked Free. FARE ALWAYS AS LOW AS THE LOWEST! For Time Tables, Through Tickets, etc., call upon the nearest Ticket Agent or write to

S. F. BOYD, Gen'l Tkt. & Pass. Agt., Minneapolis, Minn.

## NORTHERN PACIFIC RAILROAD.

THE DIRECT LINE BETWEEN

SAINT PAUL, MINNEAPOLIS, Or DULUTH, And all points in

Minnesota, Dakota, Montana, Idaho, Washington Ter'y.

### OREGON,

BRITISH COLUMBIA, PUGET SOUND

### AND ALASKA.

Express Trains Daily, to which are attached PULLMAN PALACE SLEEPERS and ELEGANT DINING CARS.

### NO CHANGE OF CARS

BETWEEN ST. PAUL AND PORTLAND, ORE. on any class of Ticket.

EMIGRANT SLEEPERS FREE. The Only All Rail Line to the

### YELLOWSTONE PARK

For full information as to time, rates etc., Address

CHAS. S. FEE, General Passenger Agent, St. Paul, Minn.

NOTICE OF FINAL PROOF—Land Office at Fargo, D. T., June 22, 1886.

Notice is hereby given that the following named settler has filed notice of his intention to make final proof in support of his claim, and that said proof will be made before the judge of the probate court, at Sherburne, D. T., on July 30th, 1886, viz: John P. Passo, B. H. No. 11,352, for the n.e. 1/4 of sec. 18, twp. 140, r. 55E. He names the following witnesses to prove his continuous residence upon, and cultivation of, said land, viz: John Anderson, Andrew Anderson, Karl Filseram, Knud Halvorsen, all of Round Bay postoffice, Griggs county, D. T.

The testimony of witnesses to be taken before J. N. Jorgensen, clerk of the district court, at Cooperstown, Griggs county, D. T., on the 10th day of Sept. A. D. 1886, at his office.

HORACE AUSTIN, Register, 23-25 Ave. Jacobson city.

### THE CHICAGO, MILWAUKEE & ST. PAUL RY

Is the Fast-Mail Short Line from St. Paul and Minneapolis via La Crosse and Milwaukee to Chicago and all points in the Eastern States and Canada. It is the only line under one management between St. Paul and Chicago, and is the finest equipped railway in the Northwest. It is the only line running sleeping cars with luxuriant smoking rooms, and the finest dining cars in the world, via the famous "River Bank Route," along the shores of Lake Pepin and the beautiful Mississippi river, to Milwaukee and Chicago. Its trains connect with those of the Northern lines in the Grand Union depot at St. Paul. No change of cars of any class between St. Paul and Chicago. For through tickets, time-tables and full information, apply to any coupon ticket agent in the Northwest. R. Miller, General Manager; J. F. Tucker, Ass't. Gen'l. Manager; A. V. H. Carpenter, Gen'l. Pass. and Tkt. Agent; Geo. H. Heafford, Ass't. Gen. Pass. and Tkt. Agent, Milwaukee, Wis. W. H. Dixon; Ass't. Gen'l. Pass. Agent, St. Paul, Minn.

### Valley City Nursery!

All kinds of fruits, Dakota grown, such as Gooseberry, Strawberry, Raspberry, Currant and Crabapple.

All kind of shade and ornamental trees. We have a line assortment of tree-claim stock, viz: Cottonwood, White-Ash, Box-Elder, Elm and Willow cuttings, at from \$1.50 to \$4.00 per 1000.

Seven hundred bushels of Tree Seeds in stock. They are fine, 1885 crop. Will sell Box-Elder seeds at \$2.40 per bushel, Express Paid, until March 1st—if stock is not exhausted before that date. Small fruit is a success in Dakota. Last season we sold over \$100 worth of strawberries, raspberries and currants. Address orders, G. W. COWDREY & CO., VALLEY CITY, DAKOTA.

Catalogue ready by Feb. 15. P. S.—Make out your order for anything you want, either vegetable, tree or flower seeds, tree claim stock, small fruits or shade trees, and we will make you low prices and furnish good stock.

### BLACKSMITHING!

The Place for Blacksmithing AS IT SHOULD BE — IS AT —

### MOORE & SANBURN'S

Roberts Street, Cooperstown.

BLACKSMITHING receives special attention and done in the best and most complete manner. JOBBER of every description.

NOTICE OF FINAL PROOF—Land Office at Fargo, D. T., July 21, 1886. Notice is hereby given that the following named settler has filed notice of his intention to make final proof in support of his claim, and that said proof will be made before the judge of the probate court, at Sherburne, D. T., on July 30th, 1886, viz: John P. Passo, B. H. No. 11,352, for the n.e. 1/4 of sec. 18, twp. 140, r. 55E. He names the following witnesses to prove his continuous residence upon, and cultivation of, said land, viz: H. B. Randall, James Sweetland, James H. MacLean, Wilbur Sweetland, all of Pickert P. O., Steele county, D. T.

HORACE AUSTIN, Register, 23-25

NOTICE OF FINAL PROOF—Land Office at Fargo, D. T., July 21, 1886. Notice is hereby given that the following named settler has filed notice of his intention to make final proof in support of his claim, and that said proof will be made before the judge of the probate court, at Sherburne, D. T., on July 30th, 1886, viz: John P. Passo, B. H. No. 11,352, for the n.e. 1/4 of sec. 18, twp. 140, r. 55E. He names the following witnesses to prove his continuous residence upon, and cultivation of, said land, viz: John Anderson, Andrew Anderson, Karl Filseram, Knud Halvorsen, all of Round Bay postoffice, Griggs county, D. T. The testimony of witnesses to be taken before J. N. Jorgensen, clerk of the district court, at Cooperstown, Griggs county, D. T., on the 10th day of Sept. A. D. 1886, at his office.

HORACE AUSTIN, Register, 23-25 Ave. Jacobson city.

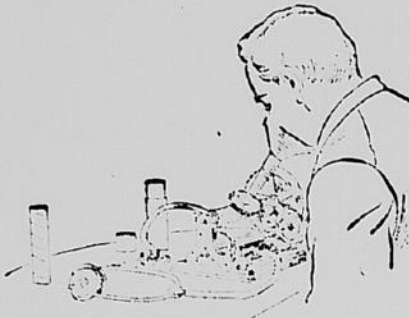
## THE GRAPHOPHONE.

EDISON'S PHONOGRAPH REVIVED UNDER A NEW NAME.

One of the Most Marvelous Inventions in the World's History—A Machine Which Records Sound, Leaving It to Be Repeated at Will.

The phonograph, which was undoubtedly the most marvelous invention of Edison's while he was yet the "Wizard of Menlo Park," is likely to be developed into something practicable. Edison gave his attention to electric lighting, while others turned their attention to the phonograph. Of the results of their labors, Frank Z. Maguire says in Harper's Weekly:

Believing in the possibility of making a successful machine to record and reproduce sounds, the Volta Laboratory association established a laboratory in the city of Washington, one of the principal objects of which was to experiment upon methods of recording and reproducing sound. After several years of experiment, the inventors of the graphophone now desire that the writer shall introduce to the world the results they have obtained.



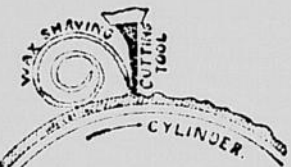
TALKING TO THE GRAPHOPHONE.

The word "graphophone" is a simple transposition of the word "phonograph," and is intended to convey the same meaning.

It was found that the wax used in the phonograph was not a suitable material for the purpose, it was not elastic enough, and its pliability and durability were not such as to permit of repeated use. Many and elaborate experiments were made to discover a substance upon which a perfect and durable sound record could be made, resulting in the idea of using a surface upon which the sound record could be cut, instead of indenting a soft and pliable substance, as is done in the Edison machine. It was finally decided upon to use a paper surface, coated with a preparation composed of wax and paraffine.

The graphophone is provided with two diaphragms, one used in making the record, and the other in reproducing the sound. The machine stands about five or six inches high by eight wide, and weighs about ten pounds. There is no skill required in the manipulation of the machine, the rotation of the cylinder being accomplished by a crank or automatic motion.

Upon a diaphragm three inches in diameter a steel point is attached, which cuts a minute hair line in the surface of the waxed cylinder upon the rotation of the diaphragm by sound. The indentation is so slight as to be scarcely perceptible, and yet these records can be gone over time and again, and are just as perfect after 100 repetitions as they were at first.



SECTION OF WAX AND CUTTING STYLE.

The diagram gives an idea of the way the steel point cuts into the surface of the wax, and also portrays an actual sound wave. This figure is magnified three times, and there are 140 lines to the inch upon the cylinder.

Upon a cylinder six inches in length by an inch and a quarter in diameter one is enabled to record at least five minutes' conversation. The cylinder-holder is constructed with a ball joint at one end, and can be easily tipped so as to allow the hollow cylinder to be rapidly slipped on or off.

The first illustration shows the graphophone in actual operation, with the operator in the act of speaking into the machine. These sound shows listeners with the ear-pieces on in the act of listening to the reproduction. If the listener does not care to use ear-pieces, or should there be four or five who wish to hear the reproduction, a trumpet attachment is placed upon the machine, which throws the sound out into the air.

This machine is in a condition at the present time to do the unannounced work usually done by stenographers. For instance, anyone may sit before the graphophone and in ordinary tones speak his daily correspondence into the machine.

In copying from dictation by the machine, the operator is enabled by a neat mechanical device to take up many words at a time, and he can conveniently re-remember, and should he forget any part of the sentence, by a slight pressure of the finger on a reel running along the base of the machine, the reproducer will repeat the sentence.

Should a correspondent also have a graphophone, the writer of a letter could in a few moments dictate what would make a lengthy epistle, enclosed in a box about the size of the apothecary's "pill box," place a stamp, thereon and transmit through the mails. The correspondent can in turn place the cylinder received upon his graphophone, and listen to the letter of his friend with his voice preserved, thereby avoiding the variation and loss of time consequent upon an encounter with bad chirography.



LISTENING TO THE REPRODUCTION.

One of the most novel and interesting features of this machine is its ability to record the sounds of a number of voices speaking at the same time; this is done on one instrument, by one diaphragm, one metallic point and upon a single line. How it is done finds an explanation in the fact that the different tones of the voices vibrate with unlike speed and force, and thus make different impressions upon the diaphragm, and move the metallic point in a different way, so as to make a record of the various sounds. The diaphragm of this machine, like the drum of the ear, can receive and record distinctly the various sounds of a quartet of singers.

The graphophone is now prepared to represent all moods. It will tell you a funny story, and laugh with you in natural tones; it will repeat a tragedy that is blood curdling in its nature; it will tell you a love story with all the ardor of a wooer; it will sing you an Irish song, or whistle a selection from the "Mikado."

Dr. Mott, of New York, an American Disciple of the Great Savant.

### PASTEUR IN AMERICA.

The pilgrimage of the five little Newark boys to Pasteur's establishment, to be treated for rabies which they were supposed to have received from a mad dog bite is still fresh in the reader's mind. Their case attracted universal attention, but to no individual did it have that special interest which it received from Dr. Valentine Mott, of New York. He is a namesake and grandson of the celebrated Dr. Mott who, prior to his death in 1855, was one of the few practitioners with a national reputation. The present Dr. Mott is a graduate of Columbia college and Bellevue Medical college. He watched Professor Pasteur's researches and the result of his experiments from their inception, and being satisfied that they were fruitful of good to humanity he resolved on founding a Pasteur care in the new world, so that patients would be saved the tedious and expensive trip to Paris. With this end in view he went to Paris last spring, and remained under Professor Pasteur's instruction for some time. He became a firm believer in the correctness of the great savant's theories, and has applied himself, with the aid of his father and his assistant, Dr. Baldwin, to their development on this side of the Atlantic.

One of the principles of the Pasteur theory is the well-known one that the human system can, by taking gradually increased doses of any poison, become so habituated or hardened to it as to be unaffected by it. This is exemplified in the case of opium and morphine habits, or in the case of what is commonly known as "poison ivy," which is equally poisonous to some people through the mere touch, while if they but chew the leaves of it it renders them proof against its action.

To carry out this principle of the Pasteur method the patient who has received the rabid virus from a mad dog's bite, and which, if it is allowed to run its course, is liable to bring its victim to death through the terrible hydrophobia, is inoculated with virus of gradually increasing strength until he becomes so habituated to taking this kind of poison into his system that not only is the original virus received from the dog's bite rendered innocuous, but he can invite rabid dogs to bite him with impunity.



DR. MOTT DRILLING A RABBIT'S CRANIUM.

How to cure the virus is one of Professor Pasteur's discoveries, and it is at this work Dr. Mott has been engaged for months past. He brought with him from Paris a rabbit that had some poison flowing through his body. On his arrival in this country this rabbit died from hydrophobia, as was expected. Then some of the virus from his body was introduced into the brain of a live and healthy rabbit through a small hole drilled in his cranium. Then on the death of this last rabbit the operation was repeated to another, and so on, the virus becoming, by transmission from one rabbit to another, weaker and weaker, and the length of time required for the virus to show its effects on each rabbit becoming more and more extended in the same ratio. Virus from each rabbit is carefully labeled and preserved in sterilized jars for future use as medicine.



THE FIRST INOCULATION IN AMERICA.

This scene may become a historic one. It was the occasion of the first treatment of a patient for rabies in America by the Pasteur method. The boy was first inoculated with virus after its transmission through fifteen rabbits. The operation is a simple and painless one, a mere abrasion of the skin of the left breast and a touch of the virus, as in vaccination. This operation will be repeated once each day for ten days, the patient receiving on the last day virus ten degrees stronger than that at first used, by which time the boy's system will have become addicted, as it were, to the rabies habit, and the original rabies he received from the dog will be rendered harmless.

The very first operation Dr. Mott performed on himself, in the presence of a number of physicians, to prove that the treatment was harmless in the case of a healthy subject.

# FARMERS

Who have any Correspondence, whatever, can save time and money by calling at

## Courier Office!

## FARM LETTER HEADS,

## ENVELOPES!

The cost is hardly more than that of the plain stationery.

## FOR FINE

## JOB PRINTING,

No office west of Minneapolis is better equipped than the

## COURIER JOB ROOMS.

Commercial Work a Specialty