

# \$25,000 CLEARANCE SALE!

## Great Bargains for Ladies and Gents.

25 per cent. Discount off all Ladies' and Gents' Ready-to-wear Clothing.

300 Ladies' Coats, cut in latest styles, all this season's stock. Most desirable shades in stripes, checks, plaids, also black, blue and grey Beavers and Friezes. Prices, \$3.75, \$4.50, \$5.00 up to \$20.00, less 25 per cent. Discount.

650 Ladies' Skirts—up-to-date in every respect—Prices, \$1.65, \$1.85, \$2.00, \$2.50 up to \$7.00, less 25 per cent. Discount.

190 Ladies' Costumes for winter wear—all new styles, made to sell at \$6.50, \$8.50 up to \$18.00, less 25 per cent. Discount.

450 Men's Overcoats, long fashionable styles, short cuts or medium lengths, with or without belts—stripes, plaids, greys, black and blues, all this season's stock. Made to sell at \$6.50, \$7.50, \$8.00, \$9.00, up to \$15.00, less 25 per cent. Discount off. Any man who needs a coat should take advantage of this sale.

750 Men's Suits. We cannot tell you all about this lot, but one glance will satisfy you that we have some great Bargains—

Prices, \$5.00, \$6.00, \$7.50 up to \$12.00, less 25 per cent. Discount.

Men's Wool Fleece Shirts and Drawers 75c. per Suit. Men's double breasted Cardigan Jackets, 98c.

The quicker you make your purchase the more you can have to choose from,  
Such an offer at this season of the year ought to make quick buyers.

Remember---We have no old stock to bother you,

Alterations made if necessary. Money back when wanted.

# WILL COX BROTHERS,

1 and 2 Market Square and 54 to 58 Dock Street.

## ARE METALS ALIVE?

(Chicago Tribune.)

So wonderful are recent discoveries in chemistry and physics that it will not be surprising if one day it be found that what we call dead matter is really alive.

An East Indian professor has gone far towards proving that tin, platinum, and other metals are quite as much alive, though in a different way, as human muscles.

One of the stock experiments shown to every medical student is one which proves that muscle contracts when it is pinched, or electrified, or excited in any other way. A little piece of muscle is cut from a recently dead frog. One extremity is attached to a fixed point and the other to the end of a pivoted lever. At the free end of the lever a writing apparatus, which rests against a moving piece of paper.

When the muscle is pinched it contracts and moves the lever, so that an upward line is marked on the paper. Then, as the muscle "lengthens again," a downward line is drawn. This happens each time that the muscle is stimulated, and the result is a diagram of wavy lines upon the paper.

The muscle, it may be said, remains alive for a considerable time after the animal has died—much longer in the case of a frog than of a warm blooded animal. So long as it is alive it can contract; so soon as it dies it ceases to contract. This is the reason why the electrical test is such an infallible test of death and prevents any danger of people being buried alive.

### MUSCLE AND METAL ACT ALIKE.

Of course, tin and platinum cannot be made to contract by pinching. Therefore, Mr. Vasu uses a slightly different experiment.

If the ends of the piece of muscle be connected with a galvanometer, which is like a mariner's compass, it is found that when the muscle is pinched, or tapped, or twisted, it produces an electrical current. Both ends produce equal currents, and so the needle of the galvanometer is not moved. But if one end be injured by nitric acid or by burning, it produces no electricity. The other end will, therefore, have things all its own way, and the electrical current which it sends forth when pinched moves the needle.

Next a depressant is tried, and the same drug which depresses our own nervous system—bromide of potassium—also depresses tin. The consequence is that the electric current from the tin is reduced in power, just as in the case of our own nerves.

### OXALIC ACID KILLS TIN.

But even a more striking effect can be produced. That deadly poison, oxalic acid, which painfully kills so many foolish suicides, is also a deadly poison to tin wire. If so small a quantity as one grain in 10,000 grains of water is used the electrical response of the tin wire is destroyed. The wire may be washed with water and scraped with

amery paper to remove the poison, but still it gives no response. It is just as dead as a poisoned human being.

This sensitiveness of metals to drugs is shown in a still more marvelous way. There are several drugs which, if taken by human beings in small doses, are stimulating, but if taken in large doses have the opposite effect. One grain of quinine two or three times a day, for instance, acts as a stimulant. But if doses of three grains and upwards are taken the effect would be seriously depressing. Now a piece of tin wire is affected in precisely the same way by solution of quinine. When three grains in a thousand of water are applied, the tin becomes more lively, and gives off a stronger current; when thirty grains in a thousand of water are used the wire is utterly paralyzed, and gives off no electricity whatever.

In many other ways the tin wire has shown evidence of possessing something remarkably like vitality. For example, it was affected by heat and cold, just as animals and plants are affected. When it was cooled down to within 9 degrees of freezing point it became exceedingly sluggish; when warmed to 86 degrees by means of hot water it became brisk, as most plants would under the same conditions, but when heated to 194 degrees it grew so feeble as to give off only a slight current.

Tin wire and strips of platinum may not be able to talk or walk. But it is obvious that they have feelings of some sort.

Vegetable substances—the stalk of a leaf, for instance—act in exactly the same way.

But the surprising thing is that a piece of tin wire will give the selfsame results.

If that were all, we would not have much reason for surmising that metals may be living things. But Mr. Vasu has performed a long series of curious experiments.

Muscle, as we all know, grows tired from use. Just as the muscles of the arm will refuse to lift a dumbbell after a certain number of times, so will the little experimental strip of muscle refuse to give electrical currents. After the first few stimuli, it will move the needle of the galvanometer less and less, until it ceases to move. If, altogether, but the same thing happens with a strip of platinum—that is to say, platinum suffers from fatigue just like muscle.

### PLATINUM GETS TIRED.

But if in lifting the dumbbell a good rest is taken between each two efforts, then one's arm does not grow tired. So with the little strand of metal. If the pinches are given at considerable intervals it will continue moving the needle equal distances. And so it is with the strip of platinum.

Nerve, on the other hand, never gets tired like muscle, and there are metals which resemble nerve in this respect. Tin was believed to be "indefatigable." But Prof. Vasu found that when he

kept it going for several days it gave in at length.

Strange as it is to find metals subject to fatigue, it is still more strange to find that they are influenced by chemicals much like ourselves. They can be stimulated, depressed, and even poisoned.

In experimenting with the strip of nerve or muscle, or leaf stalk, if some chloroform be applied to it it will cease to give an electric current, but after a time it will recover; if the poison veratrine be applied the muscle will recover, but not for a long time; if nitric or sulphuric acid be applied it will never recover.

Compare these facts with what occurs in a piece of tin or platinum wire. First the piece of wire is placed in pure water, and is then excited by a tap or two, or a twist. It gives forth an electric current, and a line of a certain height is drawn by the writing apparatus. Then a little bicarbonate of soda is dissolved in the water. This chemical has quite a stimulating effect on the tin wire, and so the electric current produced is stronger and the line on the paper becomes longer.

### ELECTRICITY AS AN ANESTHETIC.

(Electrical Review.)

Dr. Leduc, of the Faculté de Médecine in Paris has found a way of utilizing a current of electricity to produce insensibility, in place of chloroform or ether. A series of experiments on animals, dogs, rabbits and pigeons, where a current of from 10 to 20 volts alternating 10 to 200 times per second, was directed to the back and top of the head, was found to produce insensibility without harmful results. The success of the experiments so encouraged Dr. Leduc that he determined to try the effect on a human being, choosing himself as the subject. The current pressure was raised to 50 volts. The electrodes wetted with salt water to obtain a good contact were applied one to the forehead and the other to the back in order to act on the brain and spinal cord. The operation lasted about ten minutes, at the end of which time insensibility was complete. The doctor says he felt none of the inconveniences which follow the inhalation of chloroform. As soon as the current was cut off the awakening was immediate, coupled with a sensation of vigor. Other experiments are about to be tried in the hope of arriving at a happy solution of the problem of inoffensive anesthetics.

### GERMANY'S COMMERCIAL TREATIES.

BERLIN, Dec. 9.—Chancellor Von Bülow at the opening of the Reichstag today said: "The allied governments intend to lay before you after the discussions of the first reading of the budget are ended, commercial treaties with Russia, Roumania, Belgium, Italy, Switzerland and Serbia. The negotiations with Austria-Hungary have been suspended, though in consequence of a communication just made by that country there is a prospect of reaching the thing that don't interest me."

Mrs. Grammercy—Which of your social duties do you find most exacting?

Mrs. Park—To appear interested in the things that don't interest me.

Town Tattle.

### A CHALDEAN CATHEDRAL.

New Babylonian Inscription and a Mine of Wealth for the Student.

The long inscription of Gudea, King of Lagash, will be a mine of wealth to students of primitive civilization. It is not only the longest of the records of the non-Semitic inhabitants that has as yet been recovered, but its literary style is far superior to that usually employed. Essentially the inscription was a foundation record, placed in a cavity in the foundation course, and containing an account of the circumstances which led to the foundation of the temple and the ceremonies connected with the pious work. The reason for the building of the temple was a desire to pacify the city god, Ningirsu, who had caused the annual inundation of the Euphrates to fail, and thereby produced want and famine in the land.

In the dream which the king has in the sleeping chamber of the temple the god and his two attendant ministers appear, and the plan of the temple is revealed to him. After the usual prayers and ceremonies, the king is directed to make for the god a sacred procession chariot. This portion is very interesting, as it reveals some curious details of the primitive warfare of Chaldea. "The king is told" to go to his treasure house and break the seals, and take some wood from it to make a chariot to present to the god. Its body was to be of pure metal set with precious stones, and the quiver fastened to its side was to be filled with arrows as bright as the day.

The sacred lance and the tottem of the god were to be attached to this car. Some musical instrument, a trumpet or drum, called the "Dragon of the World," which produces a favorable sound before the hero in the assembly (battle), was also to be attached to the sacred car. Grand as this war chariot was, and rich in adornments and the weapons of war, it seems somewhat incongruous when we are told that "the king was to harness to it an ass."

The description is very valuable because on the Pillar of the Volturnes in the Louvre, a monument many centuries older than the cylinder inscription, we see this war chariot represented.

It must be noticed, also, that it is not until about B. C. 2300 that the horse is mentioned in the Babylonian inscriptions, being introduced from the regions of Western Persia and called the "ass of the East." The king prescribes his voting offering, and then the god is satisfied, and promises to remove the affliction on the land. The words of his address to Gudea are very scriptural in tone. He says: "On the day in which the pious Viceroy Gudea lifts a pure hand (in prayer), On high a wind shall announce the coming of abundance, and the land shall be flooded with plenty. When the foundations of my temple are laid. Then will plenty come, and I will revive the broad lands for thee—and the canals and rivulets shall be refilled. The openings in the ground from which no waters flowed I will make to pour forth for thee. Sumir (S. Babylon) will be abundantly anointed with oil and richly laden with wool. On the day when foundation is laid, I will set my steps toward the mountain, to the place where the storm dwells, and

I will send to thee a wind, it shall give life to all people." One is reminded of the cloud omen of rain given to Elisha on Carmel, while the promise of plenty reminds us of the visions of the "land of corn and wine and oil" of the Scriptures.

The delighted priest king then proceeds to carry out the wishes of the god. The inscription is important as solving the question of the title of Patesi-viceroy so often given to kings. It is clear that the god was king of the city—under a theocratic rule his human representative being the viceroy, or priest-king—in the same manner as the Pharaohs of Egypt were viceroys of Ra. In the solemn consecration of the temple much ceremony was necessary; and especially two points had to be observed. It must be a fortunate time, and so the astrologers consulted the stars, and the god revealed the star of good omen. It must also be a time of peace, and here we have another pretty touch of ancient Babylonian life. In that day when "the mother chided not her son, and that to the cross girl the mother said not a word, the slave who had done wrong his master boxed not his head, or if the female slave committed a fault her mistress smacked not her face." All omen indicating a favorable time, the grand ceremony commenced. The king was purified, purified, and the site consecrated. Sweet-smelling woods, and, above all, "aromatic cedar, the odor of which, pleasing to the gods, were heaped on the flame, and during the day prayers were said and hymns sung at night."

It is curious to notice that from this inscription that according to this ritual one of the most sacred times for prayer and sacrifice was midnight. All being ready, there came the great ceremony of laying the first brick of the temple. The king first consecrated the cushion on which the holy brick mold was to be carried by appointing it with holy water and with oil; then he placed the holy clay in the mold, and placing it on his head he showed it to the people, and then laid it in its place, and the foundation of the temple was accomplished. The love of the king for his cathedrals is very poetically expressed: "As a young man who had newly built a home he neglected nothing that tended to good; as a cow turns her eyes to her calf so he brought all his love to the temple; as a man who desires food and drink, he neglected not to visit it." It is not necessary to occupy more space in showing how valuable this inscription is as illustrating the civilized life of Chaldean cities and the sacred character of its temples more than five thousand years ago.—London Globe.

### REDUCED POSTAL RATES BETWEEN HERE AND MEXICO.

MEXICO CITY, Dec. 9.—The reduced postal rates between Mexico and Canada agreed upon by both governments probably will go into effect soon. The rates will be reduced from 10 cents (gold) and from Mexico five cents (silver), as is now the rate to the United States. The amount of correspondence between this country and Canada is steadily growing. Sir William Mulock, postmaster general of Canada, now here, is working energetically to promote direct trade with the Dominion of Canada.

### ATHLETES AND CONSUMPTION.

There must be no exercise as exercise for the consumptive patient. If you are able and feel like it, amuse yourself, but don't take exercise to build your system up. I know, I, too, have heard these stories about men given up to die who began work in a gymnasium and by violent exercise entirely recovered their health. When the lung tissue is attacked by tuberculosis it heals, if it heals at all, by fibrous scar material filling in the cavity. No new lung tissue is formed to replace what has been lost, and this scar material is useless for breathing. Suppose you had a deep cut in your hand and you kept working that hand violently, how long do you think it would take the cut to heal? When exercise is taken or you "expand the lungs" you have to work the lung tissue just as you work your hand, and if it is wounded there will be a much

larger proportion of scar material useless for breathing when it does get well.—Everybody's Magazine.

### TOUCHED THE SPOT.

Roderick—So Friday is after the rich Gotrox girl? How in the world did he make such a favorable impression with the mother?

Van Albert—Oh, that was easy. When he saw the mother and daughter together for the first time he asked if they were sisters.

### Here's a Puzzle For Somebody

AND ALL ON ACCOUNT OF

### "ROYAL HOUSEHOLD"

"The hold upon the people of Annapolis county which this 'Royal Household' flour has secured of late is one of the most remarkable things I have seen in my eighteen years business experience," said an Annapolis county merchant who attended the Halifax Exhibition. I find that the majority of my customers absolutely refuse to take anything but "Royal Household" and I tell you it is almost a serious problem with some of us as to how we are going to sell the stocks we have of other fairly good flours.