

THE GREAT FALLS LEADER.

DEVOTED TO THE AGRICULTURAL, MANUFACTURING AND MINING INTERESTS OF NORTHERN MONTANA.

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THE ELECTRIC MOTOR.

IT IS BECOMING A FORCE IN ALMOST EVERY INDUSTRY.

Five Millions Invested in the Manufacture of Electric Motors—A Successful Railroad—Electricity in a Flour Mill—The Source of Progress.

There are now about \$5,000,000 invested in the manufacture of electric motors in the United States, and this large investment has nearly all been made within the last three or four years. It represents either the independent investment of companies engaged in the exclusive manufacture of motors, or an increase in the capitalization of companies that manufacture electric light appliances, and find the construction of electric motors a good auxiliary industry. Some of these companies employ many hundred men, sometimes approaching a thousand; and they turn out motors almost innumerable each year. These motors are of all sizes, from one-half horsepower for driving sewing machines and such other light work up to several hundred horse power for heavy work. They are becoming a driving force in almost every industry, and can be utilized in localities where the cost of obtaining fuel would almost equal their operating expenses.

Our readers have already been made familiar with the names of some of the towns and cities in the United States, nearly fifty in all, that have adopted, and are preparing to adopt, the electric motor for street railway traction in preference to horses or cables. The systems in use in some of these places are very extended, that of Montgomery, Ala., counting about fifteen miles of road, and transporting over a million passengers annually. Electric roads many miles in length are also operated in some of the California cities, most noticeably San Diego and Los Angeles.

A SUCCESSFUL RAILROAD.

Recently a road twelve miles long was opened in Richmond, Va., represented by its managers, in a letter published in The Electrical Review, to be a road of peculiar difficulty in operating on account of the sharp curves and difficult grades. Some of these grades reach the maximum over curves by motors depending on the adhesion of their wheels to the tracks, and in the length there are no less than seventeen curves around right angled corners. For the managers write with the utmost enthusiasm of the successful operation of the road in every particular. The cars of the road, described as of a very elegant pattern, are not only propelled by electricity, but they are lighted by electricity, which is a great advantage when the cold weather comes they are to be heated by electricity in accordance with a system not yet generally introduced, but for which patents have been obtained.

Another field where the utility of the electric motor is soon to be illustrated on a large scale is found in the mining district of Butte county, Cal. Among the Big Bend mountains, making a horseshoe curve about a dozen miles in extent, runs the Feather river at the upper end of the curve a dam, built entirely across the river, will throw the water into a tunnel several miles in length which empties into the dark canyon, the waters of the canyon in turn emptying into the river at the lower end of the horseshoe. A water wheel and electrical generators are to be located in the canyon one mile, or a mile and a half, from its mouth, and from these generators a process of electrical conduction, which, crossing the mountains to the dam, will follow the shore of the river around the entire horseshoe, and return to the starting point. This conductor will be eighteen miles in length, estimating the distance at points here and there along the route are to be located electric motors, numbering fourteen in all. These motors will supply the power for all the pumping, hauling and hoisting demanded in the operations of mining after the water has been drawn from the bed of the stream. The cost of operating the motor can be easily estimated. It will take a man to tend the water wheel, and another man to look after the conductor and keep it in order, and this, plus the interest on the plant, which will not be considerable, will represent the entire outlay.

They are building a new capital at Topeka in Kansas, that might be a matter of no particular concern in New York, where men have learned to be weary of the very word capital. But this Kansas capital is to be built by electricity. There are four electric motors at work on the building lifting the bricks, stones and mortar up to their places, and handling the stones again into position on the walls. They are said to do their work admirably.

ELECTRICITY IN A MILL.

Away out in Laramie, W. T., there is a company known as the Laramie Milling and Elevator company. This company has a mill capable of producing 100 barrels of flour a day, and the only visible source of power is seen in a couple of little eccentrically shaped iron cases down in one corner of the roller floor. But these cases are twenty-five horse power electric motors. The manager of the company, under the recent date of April 8, gives a glowing account of their performance. Among their points of excellence he refers to their uniform rate of speed; the ease with which power can be placed where it is wanted, obviating the necessity for long lines of shafting or still more objectionable belts; the economy of room for power plant; the saving of from 30 to 50 per cent in insurance rates; and the saving on first cost of plant. The motors, he says, require very little attention, and give better service with varying loads than any other power that could be adopted.

The chief secret of the rapid advance of this new mechanical agent is found in the flexibility of its resources. Electricity is not the generator of power, but only the agency for its transmission and distribution, as it is an agent for the transmission of the human voice over the telephone wire. Through its resources power can be distributed to any point, and in quantities to suit the customer. Steam, water, air, caloric or any known agency for generating power is either stationary

or it demands stationary appliances, but electricity is its messenger boy. He flies, who will consent to do its errands invariably, and never ask a day off or the grant of liberty. Does a lady want an instantesimal bit of electrical energy to relieve her foot on the treadle of her sewing machine? It can be delivered in her room through an iron box not much bigger than her reticule. Is the restaurant keeper plagued by an invasion of flies that expel all but the most hungry and least profitable customers? They can be gently swept to the door by a multitude of revolving fans and conged out either into the bright sunlight or the refreshing shower.—New York Sun.

REAL ESTATE OXYGEN.

Something in the Atmosphere That Makes Chicago People Buy Real Estate.

Talking with a broker on the question of trade and weather he gave expression to some very peculiar ideas. For this same broker, though prominent on the street and very successful, has a wonderful imagination and frequently expresses his self in the most visionary manner. On this occasion he said: "I can tell you what the trouble is. It's the air for a dead certainty I have watched this market for years, and have seen some queer things. Under ordinary circumstances rain and snow have their effect upon the real estate market, but there are times when they do not. Say, did you ever read Dr. Odo's experiments? He says the chap you know, Jules Verne writes about as having stirred up the quiet little Dutch burg and set the steady going old residents in commotion by the aid of oxygen. Well, I want to tell you that in a minor form that very thing is transpiring around us every once in a while. There is certainly something in the air that makes people buy real estate. I feel it very quickly. The moment I get out of bed some mornings it seems as though I could not get to town quick enough, and all the way in there is a sort of suppressed eagerness to buy acres and subdivide them. I fairly have a craving to buy land.

"Well, as sure as shooting, when I reach the office I notice a activity among the clerks that is unusual, and I also notice that people begin to flock in. They do not struggle in, one at a time, and they go out almost immediately, but they crowd the office and they buy lots, too, and when they do finally leave it is with a sort of hungry look at the maps and plats as though they wanted more. You can laugh and think I am a crank, if you like, but it's a fact, all the same. Why, I attended an auction sale of lots one day when I had this hunch to buy, I tried to keep away, but I could not. Some big, bald headed fellow with a voice like a broken down colt, was acting as auctioneer, and had got the crowd in laughing hums by telling funny stories, but evidently they were not what they came out for and they began to howl for the sale to begin. The sale did begin, and so did a rainstorm, but it had no more effect on that crowd than a gentle breeze of wind, everybody had the fever, and we all stood there in the pelting rain bidding and buying until the big chap said he was cleaned out entirely and had no more lots to sell. This atmospheric boom comes very suddenly at times, another case I happened to be at where the crowd, though large, seemed apathetic, listless and listless, the salesman was doing his best, and it was uphill work for him, only a stray bid here and there reaching his ear. I was leaning against a tree, as listless as the rest, when, in a twinkling all was changed, life and animation had taken the place of lethargy, and the bids were rolling in thick and fast. I knew what it was for, I felt it sweep over me and surge through my frame like a charge of electricity—it was the real estate oxygen, and so far as I was concerned, I bought thirteen lots in the next twenty minutes. What I am telling you is right, and no funny business, and the only regret I have now is that the epidemic does not strike oftener. [I] tell you what would be a good scheme if some of those invention fellows, like Edison, would get up a machine to store this stuff and let it off upon proper occasions what real estate boom could be inaugurated; but we have no such machine yet, and have to depend upon the fitful fancy of nature for a supply, and nature has evidently got her back up at Chicago real estate men, for this strange and exhilarating air has been denied now for many weeks. Let us hope for a speedy change."—Chicago Herald.

Millions Advertisements on Broadway.

These physical wrecks of men who pace wearily up and down Broadway with placards on their fronts and backs, and familiarly called hand and feet men, are not the only persons who promenade as advertisements. Camellia advertisers are several girls sent out by leading milliner and dressmaking establishments. They are models chosen for perfection of face and figure, clothed in the newest and most pronounced costumes or bonnets, and then sent out to walk in Broadway and Fifth avenue. The girls selected for this particular service are those who have been for several years used in their employers' stores as models on which to show off goods to wealthy purchasers, and thus have become known to those customers so well that, on being seen in the streets, they are instantly recognized. Thus the freshest wares offered for sale in those particular shops are announced under the most favorable circumstances. A dress or a bonnet seen out of doors on the person of a beautiful girl is, of course, powerfully recommended, and no doubt that the manufacturers who have resorted to this novel method of announcing their novelties find a good profit in it.—New York Sun.

Understanding Her Sister's Role.

"What are you doing now?" said one actress to a port coquette whom she met in a dramatic agency. "Well, I am understanding my sister's role as a sweetheart," was the half serious, half jocular reply. "You see, Nell is not the generator of power, but only the agency for its transmission and distribution, as it is an agent for the transmission of the human voice over the telephone wire. Through its resources power can be distributed to any point, and in quantities to suit the customer. Steam, water, air, caloric or any known agency for generating power is either stationary

CHINESE SEA GRUB.

COST OF FEEDING A PAGAN ON AN OCEAN STEAMER.

A Crowd of Celestials Leaving San Francisco for Far Cathay—A Quarrelsome Set of Passengers—Little Waste in Feeding—Frolic.

The Oceanic Steamship company's office was crowded the other forenoon by Chinamen anxious to avail themselves of the reduced rate of passage by the Canadian Pacific steamship Abyssinia. Two hundred and forty took passage by her and sailed about 12 o'clock. Many held off to the last minute in the hope that better terms might be made, but the agents were inexorable.

"Don't you fumigate the office after the China steamer leaves?" asked a Hawaiian dude, who struggled to the counter through the jangling crowd of Chinamen to secure a passage to Honolulu by the Abyssinia.

"What ails you?" was the retort. "You should be familiar with the essence of Cathay, as you come from Honolulu."

"Of course I am, but nothing so rank as this." "Good money, all the same. There are no deadbeats in the Chinese passenger trade, no round trip complimentary tickets. Everything is on a basis of United States gold coin and no credit."

CHAPTER SEA LEAVES.

Happening along at lunch, the lead ship opened was followed. "See the Abyssinia lot of Chinese?" asked the dispenser of hospitality at a neighboring lunch bar. "Seem a queer lot. Give a good deal of trouble, most likely. That kind always do. There are cripples and broken down men of all kinds among them."

"Have you had experience in that trade?"

"Yes, for years. I have been employed in the Chinese trade quite a long time, but I have quit the sea. These fellows will have an army with them. They are quarrelsome and dangerous, and there are always sea lawyers about to stir up their rights, and if we were not prepared to fight at the drop of a hat it would be all up with us and the ship. We generally manage to keep them under."

"What is the rate of passage?" asked a reporter who happened to be present.

"Twenty-five dollars and whatever we can get for freight."

"Are you in for a freight war?"

"Can't tell. Know only what we are doing."

Does \$25 passage money pay the Canadian Pacific on a thirty day voyage, when the old lines could barely manage to get along with a \$50 rate?"

I should smile. But you just skimish around and find out."

"What does it cost to feed Chinese passengers?"

"I brought over 1,500 of them one trip at an average cost of four and three-quarters cents a day per man. Yes, it was a little pinched, but they had enough. Up to 300 a fair average of the cost is ten cents per head daily, above that the average lowers. I think the Pacific Mail figures on twelve cents, but that depends on circumstances."

"What kind of food do they get?"

"Chiefly rice. We take twenty-six different kinds of chows. We take white beans, brown beans, black beans, red beans, green beans—every kind of bean, except peas, mungos, dried shrimps, dried fish, dried abalone, although they get little of that. But the principal diet is rice. Five pounds of fresh beef will go as far with 100 Chinamen as with five white men. They take a big mass of rice and a small piece of fresh meat, which they lift, bite off a small morsel, and return to the dish. Then they pitch into the rice with their chopsticks and sample the sauces. They are fond of salt pork and salt meat. Fresh meat goes further. They should never get salted meat or pork."

MUST KAY OR STAY.

"Have you ever had trouble with Chinese passengers?"

"Often. I remember once in the Pacific we had a thousand of them, and they kicked about their food. I went down to find out what the trouble was, and they brought down the chief officer. The rice was not cooked to their liking."

"I will give you ten minutes to begin eating, said the chief officer, after that the rice will be thrown overboard."

"We could not move. We were surrounded. Time's up," said I, calling my boys to clear away. "Over she goes. The Chinamen looked sulky for a minute or so, and then sat down and ate the rice, and that was the last of it."

We never have any trouble coming this way until after we leave Yokohama. Up to that time the coolie is busy filling up, and by the time he reaches Yokohama he is all swollen out with rice, cutting a very ridiculous figure, with his spindly legs and overhanging stomach. After leaving Japan he is in good condition, and listens to the incoherent talk of the Chinese highlander. If we backed down or weakened in any way it would be all up with us. Chinamen are a hard crowd to handle on shipboard."

"You have only to give the Chinamen plenty to eat and you have no trouble," said an attentive listener. "I was in Hong Kong when the Abyssinia came in three trips ago, and she had trouble about the food. She then sailed from Victoria. The other vessels seldom have any bother of that kind."

"You think that ten cents per day covers the cost of the food supplied on shipboard to each Chinese passenger?"

"Yes, I do. It costs less, with care, when the numbers are large than when there are few on board. There is very little waste. I assure you. It is not a losing trade at \$25 per head."—San Francisco Examiner.

A Change of Title.

Two are riding in a street car, when one says to the other:

"Look here, Mac, here's Handley coming; he's just written a book. Remember the title, 'Forever Bereft,' and when I introduce you say something about it; it will please him."

Handley enters and is at once introduced by his friend to Mr. Mac, who says,

More consoling.

Mr. Smith—Are you fond of reparates, Miss Elsie?"

Elsie—No, sir; I prefer Oolong.

Enthusiastically.

"So glad to meet you, my dear sir. I have waited for a long time to know the author of that charming book—or—Never Got Left."—Detroit Free Press.

An Honest Criticism.

Her mother, with commendable tact and consideration, was endeavoring to say something complimentary in regard to the particularly homely infant of a friend and neighbor. But our uncompromising small heroine wouldn't have it so. "Why, mamma, dat baby looks des like one of dese little blind kittens what was left in our basement; des like a little lakewarm kitten."—Washington Herald.

Without the Middleman's Aid.

Every morning there comes to the house in which I live a fine, hale old man, with the fresh scent of country lanes about him, who brings an abundant supply of vegetables, of a quality one can only find in the most expensive green grocer's and fruit stores. He makes a business of serving the products of his little market garden across the North river to a choice list of customers in certain apartment houses of the best order. The facts are that he can deliver, and the prices he gets, while reasonable enough to satisfy his patrons, are sufficiently liberal to compensate him handsomely. There are other men, I notice, who make a specialty of fresh eggs and other fresh or rather unmodified which they deliver after the same fashion, directly from their farmer's poultry yards. They pay no tribute to a middleman, nor are they under any expense for a city shop. They begin by drumming up custom in good measure, and, as they serve the best of material, are not long in establishing a profitable connection. After this it is plain sailing with them.

The business of putting up preserves and jellies seems also to be extensively followed by rural housewives, who seek their industry in much the same way. Some of them advertise in the family papers. The majority employ a drummer to beat up custom for them, and they can afford the expense of advertisement or the salary of an agent, and still make a greater profit than if they sold their products to the shops, may serve as a slight hint of the proportions of gain that fall to the middle man or retailer. A man in Fordham, who has quite an extensive fruit farm, which, thanks to his passion for improving varieties, produces some of the finest fruit in the country, informs me that he now gets nearly three times as much for the product of his orchard, which he retains himself, than he did when he sold it to a fruiterer. And still his customers get it cheaper than they did from the fruit shop.—Alfred Trumble in New York News.

Race and Mental Disease.

In an article entitled "Race and Insanity," published in The American Journal of Insanity, Dr. Benister and Hekton, physicians of the Illinois eastern hospital for the insane, express the opinion that there is little doubt but that insanity is influenced by race. From the statistics of three institutions in which insane persons are treated they draw the following conclusions: 1. That in the white race the depressive types of mental disease are most frequent in the Germanic and Scandinavian peoples, and least so in the Celts; the reverse of this appears to be the case as to the exalted or maniacal types. 2. That general paralysis is not a disorder to which any race is immune, but one that depends upon causes independent of racial or national peculiarities. 3. That the well known fact that insanity is much more common among the foreign born than among natives in this country is not, as is so often explained, by the shipment of the defective classes of Europe to America.

The "cranks" and epileptics and other neurotic individuals do not appear to be represented, in due proportion even, among the foreigners in our asylums. The cause of the excess of foreign born insane in this country is, it seems probable, to be looked for mainly in the fact that, supposing the immigration to include only its proportion of persons below the average of mental strength and flexibility, the changes of scene and associations, the difficulties of beginning life among them, disappointments, homesickness, and all the other accidents and trials that befall the new comers, together contribute to break down mentally a vast number who under other circumstances would have escaped, and largely contribute to the mass of insanity in this country.—Science.

Charcoal Burners of Cuba.

During the first day of our excursion our quest was rewarded with nothing in the shape of deep-wood sights or tannery, though the very earth seemed filled with songs and calls of negritos, mayitos, aborons, zorales, totises, chinchiguacos, solivios, pitorras, and other quaint and mocking birds, which frequent the more open districts and plantation trees and hedges; but as we neared the denser forests, along towards daylight, we came upon a little settlement of people well worth going a long distance to know.

These were the Cuban carboneros or charcoal burners. As all of the cooking and much of the manufacturing requiring heat in the Cuban cities are done with charcoal, charcoal burning provides a sort of living loom for a sturdy and picturesque class, who fell timber and burn charcoal at will in the countless island forests. These carboneros comprise some queer people. Most of them are inoffensive and hospitable, but many are refugees from the late revolution, for the Spanish soldiery deem it wise not to disturb any body in these almost inaccessible haunts. So, aside from insurgent refugees, in nearly every carbonero's camp will also be found, if you happen to be in company with those whose sympathies are with a certain flag which waded defiance to the hated Spanish red and gold over the blood-stained fields of Camagney, here and there a noted bandit who could never be taken from among his swartly friends.—Edgar L. Wakeman's Letter in Philadelphia Times.

More consoling.

Mr. Smith—Are you fond of reparates, Miss Elsie?"

Elsie—No, sir; I prefer Oolong.

G. A. BROADWATER, President.

PAUL GIBSON, Vice-President.

C. M. WEBSTER, Secretary.

A. E. DICKERMAN, Treasurer.

The Great Falls Water-Power & Townsite Co.

THE INDUSTRIAL CITY.

GREAT FALLS, having the greatest available water-power on the American continent, is destined to be the chief industrial city of the northwest. The Montana Sheeping Company is now erecting here the largest works for the reduction of ore in the United States, and other extensive manufacturing enterprises will soon be inaugurated.

GREAT FALLS is now the terminus of three railroads—the St. Paul, Minneapolis & Manitoba, the Montana Central and the Great Falls and Sand Coulee line.

It is the Commercial Center of Northern Montana.

It has a population of 2000 and is growing rapidly. Enterprises now under way and to be inaugurated will more than double the population this year. No town in the Rocky Mountain region offers greater inducements to the settler or investor, and all such are respectfully invited to come and see for themselves.

For information regarding GREAT FALLS and surrounding country, address

CHAS. M. WEBSTER, Secretary,
Great Falls, Montana.

DO YOU WONDER

That my store has fairly swarmed with eager buyers every day this year? Well, it is no surprise when you know the bargains I am giving in everything in my line, and that I am selling goods at fully 25 per cent lower than they have ever had sold here before.

Coats, - Pants - and - Vests.

Gents' Furnishing Goods, Boots and Shoes.

Hatters and Shippers of all kinds, Boys' Suits of the latest styles, etc., etc.

HATS! HATS! HATS!

Silk Hats, Derby Hats, Fur Hats, Cow Boy Hats and in fact every style known to the hat-maker. Hats for old men, hats for young men, hats for boys, hats for children, hats to fit every head and every pocket-book at about 25 to 40 per cent less than ever sold here before.

SPRING OVERCOATS!

My assortment this season is immense in quality and great in variety. All of the popular styles and colors, made of the finest fabrics and in the latest and most approved styles, are shown by me. Some are silk faced, some are full silk and extra lined, and all of them are made up in the highest quality tailoring art. My prices on all goods cannot be equalled in the city. You'll make me money by seeing my performance.

ONE-PRICE CLOTHIER. A. NATHAN, Central Ave. Great Falls.

New York Cash Bazaar.

THE SPECIAL BARGAIN STORE!

The Almighty Dollar, the Many have too few and the few too Many.

NOTE THE FOLLOWING EXTREMELY LOW PRICES:

Ladies' Fine Kid Shoes	my price \$2.00	Montana price \$2.50
Ladies' Fine French Kid Shoes	my price 2.00	Montana price 2.50
Ladies' Great worked Buttonhole Shoes	my price 1.49	Montana price 2.00
Ladies' Great worked Buttonhole Shoes, best quality	my price 2.25	Montana price 2.50
Children's Sador Lin Shoes	my price 1.00	Montana price 1.50
Children's Fine High Cut Shoes	my price 1.50	Montana price 2.00
Men's Hats, White Vamp	my price 2.00	Montana price 2.50
Men's Hats, White Vamp	my price 2.00	Montana price 2.50
Men's Congress or Hats, Fine Cut, Gooder Well	my price 2.25	Montana price 2.50
Men's Spring Hats	my price .65	Montana price 1.00
Men's Fine Fur Hats	my price 1.75	Montana price 2.50
Men's Still Hats	my price 1.25	Montana price 2.00

Everything else in proportion. A full line of Dry Goods, Millinery, Notions and Gents' furnishing Goods at Panic Prices.

R. D. BECKON, Central Avenue.

Northwestern Fuel Company.

Coal delivered direct from the mines	\$7 per ton.
Lime	\$15 per ton.
Montana baled hay	\$16 per ton.
Oats	\$1.50 per 100 lbs

Merchandise and furniture moved to any part of the city. Freight received and forwarded. Office corner of Central Avenue and Fourth street.

T. R. MAYO,

Expert Tonsorial Artist. Park Hotel, Great Falls

In Connection, the Best-Appointed Bath-Rooms in the City.