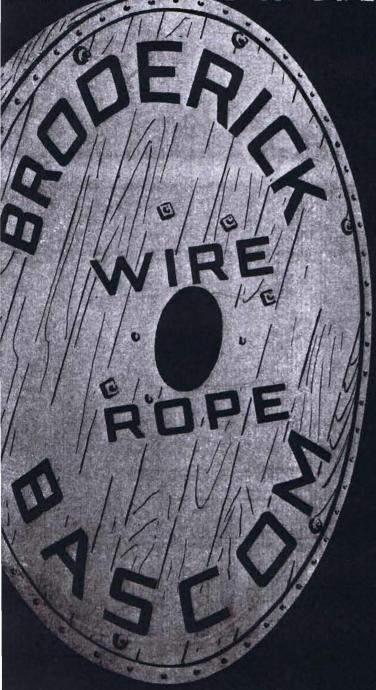
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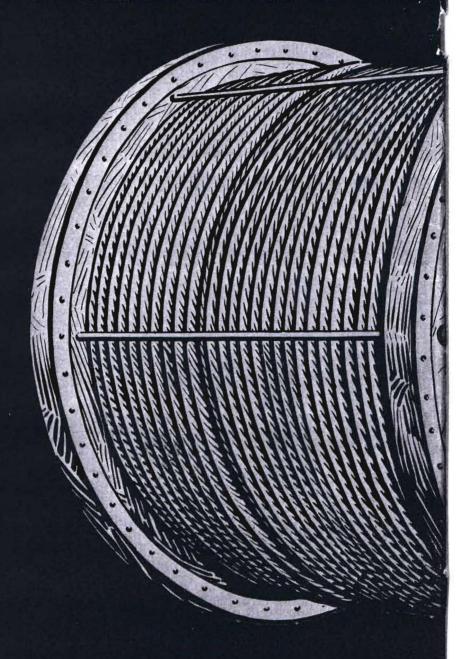
E BASCOM POPE CO.-ST. LOUIS-MAY 1926



n Jubilee-1926

# The TELLON

Vol.44-No.1 - PUBLISHED BY THE BRODERICK



1876 - Our Gold



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Vol. 44



## JOSEPH D. BASCOM

Chairman of the Board of Directors
BRODERICK & BASCOM ROPE COMPANY

A Pioneer of the Wire Rope Industry

WHO can measure the strength of the cable of Good Will which his mind and heart and hand have wrought these fifty years? For the power of friendship's cable lies not alone in the strength of its steel wires, but in the Golden Strand of integrity which threads its length.

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## CONTILLOW STRAND

Registered in U. S. Patent Office.

Published every month since October, 1904. by Broderick & Bascom Rope Co. St. Louis, New York, Seattle.

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Vol. 44

MAY, 1926

No. 1

1876



HERE is one biographer who means to break a precedent. It is so easy to moralize and philosophize on the fiftieth anniversary of one's business. The occasion lends itself to moralizing and philosophizing. We might almost say that one is expected to pose upon the Golden Pinnacle of Achievement after fifty years and drop sage observations from The Heights.

One reason, alone, is enough to deter us from doing the expected. You see, we have climbed steadily up the Mountain of Progress for fifty years. We're still scaling the heights with the help of our stout ropes. But we haven't reached the Pinnacle of Achievement. Just between us, we know we never shall. And here is why:

This Mountain of Progress, from our point of view, is a man-made mountain. It's a composite of all the industries which employ wire rope. Fifty years ago it was a mere hillock. Today, it rises to a superb altitude. Tomorrow it will rear itself to still greater heights. At least we hope so. For to climb, strand over strand, with industry, is far more to our liking than to sit idly on the so-called Pinnacle of Achievement and let the growing Mountain of Progress overwhelm us.

Thus, this biographer we repeat, discards the philosophizing privileges of a Golden Anniversifier, and begins his Tale of Fifty Years where all good tales should begin — at the beginning.



1926

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## A Story of Fifty Years

HE year 1876 was an epochal one. If you doubt it, turn to the public prints of fifty years ago. Read your United States History.

This was the year that Sitting Bull with his 2000 Sioux braves fell upon and massacred Gen. Custer and his 300 cavalrymen in the Little Big Horn in Montana.

This was the year that Alexander Graham Bell, an obscure teacher of the deaf in Boston, invented an instrument through which one might hear voices transmitted from a distance, over a conducting wire.

This was the year that the Jarrett and Palmer train made its famous cross-country run from Jersey City to San Francisco in a short 83 hours and 45 minutes.

This was the year of the Nation's own centennial, celebrated at Philadelphia by a great exposition. Probably noth-

ing could give you a clearer picture of the times than to turn the flash light back to the halls of the Centennial Exhibition and to focus its rays on some of the marvels shown.

## Marvels of the Philadelphia Centennial

Here is a peculiar device having a movable carriage and rows of keys with the letters of the alphabet marked thereon. Each key manipulates a type character soldered to a metal arm. It is thought that the machine has great commercial possibilities and will eventually displace the hand-written work of clerks in offices.

Here, among the exhibits of a firm of English wire drawers, is a good showing of hoop-skirt wires.

Here is a great clumsy machine, which, driven by steam, is said to smooth the hummocks in rough roads.

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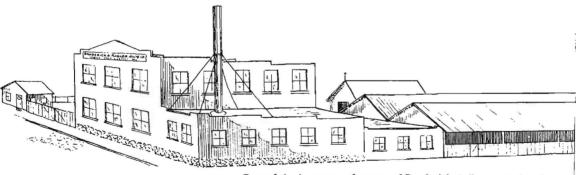
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One of the important features of Broderick & Bascom's first factory

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The Yellow Strand

Over yonder is a complicated device with a maze of gears and levers and rods and keys which is expected to take the place of a bookkeeper's overtaxed brain. They say that it will do his calculating for him.

Here is a gay contrivance, with a small wheel fore, a huge wheel aft and a saddle aloft. This is the so-called bicycle. It is freely predicted that this vehicle will displace the horse for local travel.

On the other hand, among the landaus, Victorias and sulkies, a firm called Studebaker Bros. of South Bend, Ind. exhibit a wagon so gorgeous, with its "piano box body and enameled leather, painted in black," that it's segregated in a handsome plate glass case. Long live the horse! And may the carriage business prosper!

C. Wm. Siemens is exhibiting his new rotating furnace for making steel and iron from the ore—also his well-known regenerating gas furnace which, as all know, has done so much to advance the iron industry.

#### "Current Events" of 1876

The world is indeed moving in 1876, and the world is being moved, too. Work on the St. Gothard Tunnel has progressed to a distance of nearly four miles, with 5½ miles still to go... Several gas wells of Pennsylvania are harnessed to the foundries of Pittsburgh, the gas being used for puddling iron... Peter Fernandez, of Spain, has already demonstrated in San Francisco Bay, his boat which navigates under water... China is building her first railroad... The East River Bridge, joining New

York and Brooklyn, designed and being built by the house of Roebling, is coming on fine... Baltimore is trying out steam street railways ... Reports are rife that M. Bourbouge has succeeded in sending telegrams without wires for a short distance, but the expenditure of electricity is said to be enormous, "not less than 40 elements being required to work a magnetic needle at a distance of one-fourth mile"... The Royal Institute of British Architects are having a prolonged discussion as to the practicability of reinforced concrete for building. The President cautions the apostles of the new construction method, "not to claim too much for it, as nothing is so likely to damage a new material in public estimation, as exaggeration of its merits" Captain Eads is employed by the U.S. Government to make a navigable channel at the mouth of the Mississippi, by building two great jetties . . .

The final item brings us up with a jerk, from our reminiscences. For, the last big contract which Capt. Eads had undertaken before the one mentioned, was to build the bridge at St. Louis, which now bears his name. And, with the building of this bridge, the idea of the organization of the Broderick & Bascom Rope Company of St. Louis was conceived.

### New Rope Works in St. Louis Doesn't Set World Aflame

It would be idle to say that the establishment of a new wire rope factory in St. Louis caused so much as a ripple in the heavy stream of events of 1876. Passing mention of the new "rope works" was made in the trade papers of the



erick & Bascom's first factory

was the Rope Walk where hemp ropes were laid up by hand.

Broderick Bascom Rope Co. period. In the local newspapers, a casual notice of the infant industry appeared in the columns of "Partnerships Formed." To be brutally frank about it, practically the only persons to whom the establishment of a new rope works



"Laying up" wire rope by hand. Weighted sled dragged forward as twisting proceeds.

in St. Louis was of supreme importance, were young John Broderick and Joe Bascom, the founders.

To these two young fellows, remember, all the items of antiquated history recited in

the foregoing paragraphs, were live, pulsating, inspiring current events. The young progressives recognized the fact that the world was entering an era of unprecedented development, electrical, industrial and mechanical. The signs were everywhere patent.

The terms "dynamo," "magneto," "generator," and other nomenclature of the electric age were beginning to roll glibly off the tongue of technicians, although it is doubtful if the most sanguine among them would have predicted the coming of, say, the hydro-electric plants of today with a combined power almost beyond human comprehension.

Industries were flourishing. To name just a few: The petroleum industry, less than 20 years old, had its tanks, its pipe lines, its tank cars, its efficiently operated refineries. The production of copper, lead, iron and zinc was growing apace. The grand total of the steel produced in the United States in 1870 was 68,750 long tons. By 1876 steel was being turned out to the tune of 533,191 long tons. There was even some talk of fabricating steel for building construction.

#### The Cable Car Makes Its Debut

There were 74,658 miles of steam railroads in 1875. A device called the [6]

cable car had been invented and seemed destined to revolutionize city street railway travel.

Try to see all these significant developments and scores of others, through the eyes of two young men of 1876. What opportunities they presented! Cable cars needed cables. Railways reguired switch-ropes. Lower and lower were the petroleum seekers drilling for their precious fluid. Deeper and deeper were being sunk the shafts of metal mines. Higher and higher were being reared the buildings of great cities. Stronger and mightier must be built the machinery for drilling, for hoisting, for handling material. Then, to match the machinery in strength and might, something stronger and mightier than manila rope must be made. And, if we may here lapse into the vernacular, young John Broderick and Joe Bascom decided that they were the boys to make them.

## John, the Shipping Clerk and Joe, the Bill Clerk

John J. Broderick had brought his parents to America from Ireland when he was but two years old. That phrasing is the literal truth. For it was the baby, or at least his future, which caused his father to emigrate to the Land of Opportunity. Joseph D. Bascom was of pioneer American stock, tracing his ancestry back to one Thomas Bascom, who landed at Northampton, Mass. in 1634.

Being entirely normal youths of their period, neither felt the lure for what is now termed "Higher Education," which means very likely, higher "Higher"



Other end of same operation.

likely, higher than "High." After eight to ten years in the schoolroom, Flaming Youth of the middle 60's felt amply equipped to swing the world by its well-known tail.

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Yellow Strand

JOHN J. BRODERICK Co-founder and first president, B. & B. Rope Co. Born December 29, 1846. Died June 7, 1919.

Both John and Joe got their grasp on the caudal appendage of the universe in the office of the St. Louis Railway Supply Co. By 1867, when John was 20 and Joe was 18, the former had reached the exalted position of shipping clerk and the latter of bill clerk.

Not only their work but their common love of sports drew them together. It became almost a local legend about this time that there couldn't nobody lick that there Broderick and Bascom on a hand-ball court.

Now, not every shipping clerk and bill clerk of a supply house has the gift of reading significance in the figures which pass through his hands. Our heroes gave profound thought to the enormous orders going through "the house" for wire ropes to be used in the construction of the new St. Louis and Illinois Bridge, being built by Capt. Eads at the foot of Washington Ave.

Like thousands of St. Louis youths, they had viewed with fascination the work being done on Eads' masterpiece of engineering, since the piers were sunk in 1867. They were interested spectators of its progress. They saw, in

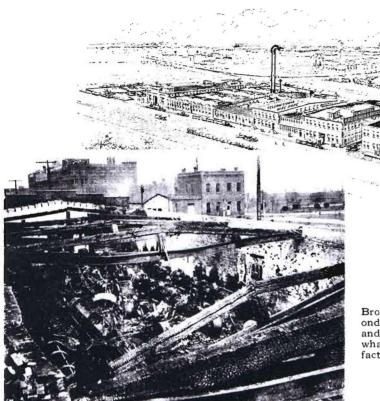
actual operation, huge cables, the orders for which had passed through their own hands.

Young Broderick and Bascom also noted the figures on the statements and shipping tags which accompanied other wire rope shipments to St. Louis and foreign territory. And as has been said earlier in this chronicle, they read carefully the current news. New Cable Cars. New Railroads. New Bridges. New Mines. New Deep Wells. New Power Plants. All, all needed wire rope. Here was the product with a future.

#### Mentz Starts The "Works"

So John J. Broderick and Joseph D. Bascom, with the small capital they had saved and plenty of "cheek," decided to become wire rope manufacturers. Did they know much about it? No. But, by Jove! they knew somebody who did.

This was William Mentz, who, originally a hemp rope and twine maker, had manufactured in 1861 or 1863, the first wire rope (of which there is any record) in St. Louis, or indeed, anywhere between the Allegheny and the Sierra Nevada Mountains.



Broderick & Bascom's second plant, located at Main and Douglas Streets; and what fire did to part of this factory in 1922.

Mentz, it was, who, with a partner, Campbell, manufactured all the cable used in constructing Eads Bridge. The firm was financed by the St. Louis Railway Supply Co. Mr. Campbell died about 1868.

Broderick Bascom Rope Co.

Mr. Mentz, approached by the two embryo wire rope magnates, was not averse to their proposal to put him in charge of the manufacturing end of their proposed "rope works." It had its manifest advantages, this joining forces with an independent company.

In the Fall of 1875, the new firm was established and the actual manufacture of wire rope was begun in January, 1876.

#### The Day of the Rope-Walk

The tools of the trade and the buildings necessary for the manufacture of wire rope were simple enough in 1876. [8]

As in making the humbler manila rope, the manufacture of wire cables was largely a hand operation. The most necessary element, so to speak, was space, for the wires were twisted into strands and the strands laid up into rope in an old-fashioned "rope-walk," which was necessarily 10% to 12% longer than the length of rope to be made.

The "rope-walk" of the infant concern was about one-half mile long, and, considering present property values at Fair and Kossuth Avenues, the site of their first factory, one shudders to think of the rental if the hand-work method were employed today.

Obviously, when cables more than 2000 feet or so were required, splicing was necessary. On occasion, though, the whole paraphernalia for rope making was taken to the prairies lying

north of miles from "great ope have also solidly buildences."

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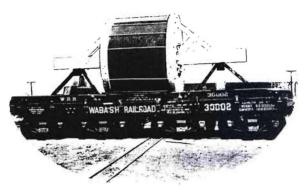
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At left: 135,870 pounds of wire rope in one reel. This 33,212foot cable was shipped to the Metropolitan Traction Co., New York.

Below: Forty horses handled this 31,635-foot cable through the streets of St. Louis for the Citizens Ry. Co. It weighed 91,555 pounds, alone. Weight, with wagon, 125,000 pounds.

north of Tower Grove Park, miles from the factory. These "great open spaces" of 1876 have also long since become solidly built-up blocks of residences.

The longest continuous rope ever laid up "by hand" on this site was 4000 feet long.

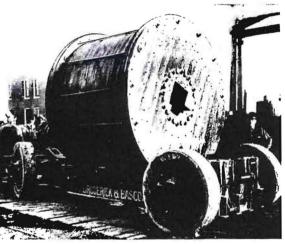
#### Making Wire Rope by Hand

The hand-making process was slow and crude. For example: Only strands containing seven or twelve wires could be made at one operation. If a 19-wire strand was required, it was

necessary to first make a 7-wire strand, then repeat the process to "lay" the other 12 wires around it.

One end of each wire for a strand was attached to a "gallus," or large frame. Trestles were placed at intervals to support the wires "flat." At the opposite end of the "rope-walk" the wires were run through a cone-shaped "top," with grooves around it to keep the wires from slipping, and with a hole through the center for the center wire. Beyond the "top," the wires were attached to a single hook on a stationary "twisting platform." A handle was fastened to the hook.

One man turned the handle. Another



toward the "gallus" as the strand formed. Two boys preceded him. Their function was to lift and guide the wires and to kick over the trestles as they came to them.

To "lay up" the rope, practically the same system was employed on a "heavier" scale. The "twisting platform" for the laying up process, however, was movable, dragging along the ground on a sled. The sled was kept heavily weighted to keep the strands at proper tension. For heavy ropes, three or even four men were required to manipulate the handle.

At the far end, the strands were fastened to hooks. Each hook had an Sshaped rod, which projected through an grasped the "top" and moved with it upright stationary board. The ends of



these rods were run through holes in a circular board having a handle on either end. Two men grasped these handles and with them, regulated all six strands. A hemp center or core was stretched from one end of the cable to the other and kept taut with block and tackle.

Midway of the rope-walk, a man was stationed to "semaphore" direction with his hands, to the men at either end. Upon this man's alertness and the ability of the men at the ends to follow his signals, depended the evenness of the "lay" of a Broderick & Bascom Rope up to 1883.

#### Vocal Messages "By Wire" In 1876

Even eternal watchfulness could not make the hand-making method entirely safe. Sheep and cattle had a habit of strolling in the way. The horns of the cows caught the wires and pulled them awry. Sheep divided their energies between scrambling up or being scrambled up by the wires. On one occasion a woman of this pre-bob period attempted to pass underneath the wires, her hair was caught in the twisting strands and only her outcries saved her from being scalped.

In this connection, old employees of the Broderick & Bascom Rope Co.—gray headed old men today—stand ready to swear that they were among the earliest believers in the conductiveness of sound waves over wires. Earlier in the same year that Bell exhibited his revolutionary device at Philadelphia, two gangs of men stationed at opposite ends of a 3,500-foot strand in the B. & B. rope-walk, were awed to hear the voices of the other group proceed mysteriously from the wires in their hands.

Of course, there was no electricity present—the sound was due to vibration, tension and possibly to atmospheric conditions. The gangs made use of this phenomenon, at times, to shout simple directions, such as "stop!" or "slack!" but ordinarily, the signals were given in the more orthodox methods—by waving or tapping.

[10]

Mr. Mentz remained with the Broderick & Bascom Rope Co. until his death.

#### Machine Era Begins 1883

In the organization was a bright young fellow named Frederick—E. P. Frederick, who was put in charge of the company's barbed wire plant when he joined them in 1877. Or, it would be more correct to say that his first duty on coming to the company was to design the very machinery for this barbed wire plant.

Mr. Frederick was superintendent of the barbed wire department until 1880. Then, the two young partners confided to him their big secret. Business was developing too quickly for their productive end to take care of it. Mechanical operation was the order of the day. To Mr. Frederick would be left the entire responsibility of designing and laying out a plant and procuring for it the most modern machinery obtainable.

This mission, in 1882, took Mr. Frederick to England, the country preeminent in the manufacture of wire and wire products. The year 1882 was notable for another event—the incorporation of the company, with Mr. Broderick as President and Mr. Bascom as Secretary and Treasurer. The machinery which Mr. Frederick ordered in England was delivered in 1883 to the new plant at Kossuth and Fair Avenues. This gave Broderick & Bascom the distinction of having the first wire rope machinery ever installed between the Allegheny and Sierra Nevada Mountains. The distinction was "unique" for many years.

## Enter: "The Second Generation"

Now the B. & B. factory, like all wire rope manufacturing plants had (and still has), a strict rule against admitting visitors. But, dating from the installation of the machinery, two visitors refused to be kept out. To this pair, the flash of silvery strands of wire, the thunder and crash of the stranding and closing machines, the endless coiling of

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The Yellow Strand

first B. & B. plant.

cable piling up onto great drums— factory), was the scene of some s

The visitors were two mature gentlemen of 8 or 10 summers, who, if pressed, would tell you that their names were John K. Broderick and Charles E. Bascom, respectively, and that they were "comin" to work here before long."

proved irresistible.

## New Factory—New Machinery —Whopping Big Cables

The new factory, a two-story building, was destroyed by fire in 1887. This disastrous experience convinced the company that a two-story building was impracticable for wire rope making. A temporary one-story building was erected on the old site. This was occupied until 1892.

In the meantime, the company had acquired some property at Main and Douglas Streets, a site which offered better switching facilities and fire protection than that to be had at their factory in the outlying district.

The plant at Main and Douglas, also designed and laid out by Mr. Frederick, (who by now was superintendent of the

factory), was the scene of some spectacular feats in wire rope manufacture. It was here that Mr. Frederick installed a colossal "Closing Machine" of his own design. And none too soon. The cable car was in its heyday and the continuous lengths and great sizes of ropes required for this popular transportation system were most difficult to produce with the then-existing machinery.

Mr. Frederick's Closing Machine was, and is (for the Old War Horse still tells out its lengths of mighty cables for mountain inclines and logging skylines), responsible for the production of some tremendous cables, notable among them being a 36,000-foot cable, 1½-inch in diameter and weighing 142,000 pounds, made in one continuous length. This cable, manufactured for the Lexington Avenue Cable Line of New York City, was shipped to the metropolis on a 16-wheel car made especially for the Broderick & Bascom Rope Co. The reel was eleven feet in diameter.

Broderick & Bascom's street railway cables were, by now, being used in most big cities over the country. San Franciscans "moved" on a 36,348-foot B. & B.

Broderick & Bascom Rope Co. Cable, one line for Omaha was 35,000 feet long, one for Kansas City was 33,285 feet long, scores were 20,000 or more feet in length.

Mr. Frederick's success with his Closing Machine encouraged him to break still further away from precedent and it was not many years before all of the original machines imported from England were displaced by new machinery of his own design. These designs are the exclusive properties of the Broderick & Bascom Rope Co.

### Genesis of Yellow Strand Wire Rope

But there was one "import" from England which was not displaced and has never been displaced in the Broderick & Bascom factories. This was the steel wire for manufacturing what was then known in the plant and to the B. & B. trade as "Power" Rope, the same brand which was later called "Powersteel" and still later, "Yellow Strand Powersteel."

Since its inception, the company had been having this wire drawn especially to its order by the famous wire drawers of England.

In 1876, no American ores could be found to produce steel worthy of the "Power" mark. In 1876, no American wire drawers had reached the degree of efficiency attained by their British brethren, with their centuries of experience in the craft.

These things are as true in 1926 as they were in 1876. Now, the Broderick & Bascom Rope Co. manufactures wire ropes drawn from American-made steel wires, and they are good ropes. They are strong ropes. They are trustworthy ropes. But they are not in the class with Yellow Strand Wire Ropes.

Yellow Strand's supremacy begins with the ore—Swedish, known for its freedom from sulphur and phosphorus. Its wires are produced by slow, painstaking, oft-repeated drawing. They [12]

are tested times without number. They are rejected by the Broderick & Bascom Rope Co. unless they meet the specifications of 240,000 to 260,000 pounds tensile strength per square inch. And, from the start of the Broderick & Bascom institution, the wires have been laid up into ropes to attain the very maximum of elasticity.

### New York Office Opens In 1905

The advent of the skyscraper, and the use of more and more powerful machinery for logging, drilling and mining, gave a mighty impetus to the wire rope business between 1895 and 1905. By the latter date, even with the most capable representatives in the East, the St. Louis factory could not supply the demand for Yellow Strand and other B. & B. Ropes along the Atlantic Coast.

In 1905, the company sought and found a representative to take charge of an office in New York City and to establish and maintain a warehouse there. The company had the good fortune to secure the services of a young man who knew cables to the core. This was one Mr. C. Arthur Dunlavy, a master-salesman of wire rope.

Now it may be said right here that "C. Arthur" is as keen on the job today as he was 20 years ago. From his head-quarters, now at 76 Warren St., have moved cables for some of the biggest building and engineering feats of the past two decades.

Mr. Dunlavy and his co-workers supplied cables for the construction of the Woolworth Building, the Hudson River Tunnel, the New York State Barge Canal, the Municipal Building, the Hell Gate Power Plant—to name just a few.

Many millions of feet of cable have been shipped abroad from this warehouse to do duty in the oil fields of Asia and Africa, the mines of Mexico, South America, Europe, Australia, in short, over all the world.

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JOHN J. BRODERICK Former President, from a photograph taken in 1882. JOSEPH D. BASCOM Chairman of the Board About the time that Broderick & Bascom Rope Company was established.

### Factory Built in Seattle

As in the East, the West. By 1907, the logging fraternity on the Pacific Coast literally wailed for logging cables powerful enough to handle the immense "sticks" they were taking out.

Accordingly, a factory was that year built at Seattle. Profiting by their St. Louis experience, a one-story plant was designed and constructed, under direction of Mr. Frederick. Almost 20 years

later, this plant is still conceded to be one of the finest, most productive and economically operated factories on the West Coast.

Here, too, an experienced wire rope man was put in charge. He was succeeded in 1914 by Mr. H. W. Wilker, who, as a youth, in 1890 began work with the company as "spooling boy." He rose successively to factory shipping clerk, then to salesman. "H. W." still rules the roost at Seattle. He has de-

[13]

Yellow

Strand

Broderick & Bascom Rope Co. expectations of his company.

#### Special Yellow Strand Breaks Records at Panama

After this coast-to-coast digression, let us return to the St. Louis factory at Main and Douglas.

It was here that there was developed in 1909, a special kind of rope, designed to meet a very special condition. Uncle Sam, it seems, was having cable trouble at Panama and was in the market for wire rope that could stand the tremendous strain of dragging a plow through the Ballast Unloaders, which emptied the numberless trainloads of excavated dirt and rocks onto "dumps."

Beside the "pulling" strain, the wire rope was subjected to tremendous friction as it scraped the rocks, and frequently cut deep gashes into them. The friction was so great that sufficient heat was generated to cause the rock to smoke.

All wire rope manufacturers were apprised of these conditions. Among those who made personal investigation at the site, were Mr. C. E. Bascom and Mr. Frederick. The latter early decided that no existing type of rope would stand the strain of unloading soil and rock. Back at the plant, he solved the problem. He laid up around the regulation Yellow Strand Wire Rope, another Yellow Strand Wire Rope to protect it. This construction was patented by Mr. Frederick. It was given the name of "Brobas" Wire Rope. This trade - marked name is a combination of the first three letters of the names of the company's two founders.

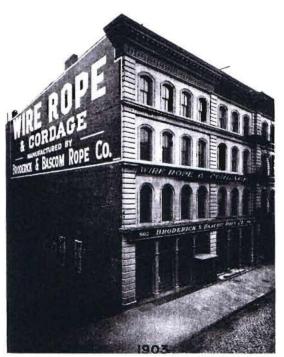
"Brobas" went to Panama. And the first thing "Brobas" did was to exceed the previous "best record" of 1,175 trains unloaded, by 700 trains (over 60%). In other words, "Brobas" established a record of 1,875 trains, with an average of [14]

veloped his territory beyond the fondest 17 cars to the train, which record "Brobas" later greatly exceeded.

#### Mr. Frederick Develops Standard Construction

The loggers' needs were responsible for Mr. Frederick's development of the so-called Standard Construction in wire rope, which has since been adopted by all other wire rope manufacturers. The aim and end of this construction is elasticity, without which even a rope of high tensile strength is a flat failure in logging.

Another contribution to his company's progress, was Mr. Frederick's Universal Stranding Machine, which enables several vital processes to be combined in one operation.



General office and warehouse of Broderick & Bascom Rope Co. in downtown St. Louis as it appeared in 1903. Today the Tramway Department Machine Shop occupies the space at left.

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"76 Warren St.,"
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Strand Ropes for
some of the biggest engineering
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Easternoffice and
warehouse, established in 1905.

From the factory at Main and Douglas, were shipped the tapered ropes which drilled some of the company's deepest gas wells; from here went ropes for the deepest copper mines in the world; from here went miles of ropes which helped lay the mine barrage that effectually blocked the gateway to the North Sea in 1918.

For the better part of the entire war, both factories were commandeered by the Government and given over to the production of wire rope for purposes of warfare.

## New Million Dollar Factory Is Model Plant

In 1922, another fire crippled production temporarily, but did not entirely destroy the plant. Repairs were made which enabled the company to "carry on" until the completion, two years later, of their new million-dollar fireproof factory, a plant which is the realization of the very dreams of its designer—none other than our old friend Mr. E. P. Frederick.

As told earlier in this story, no wire rope factory is noted for hospitality, but, on this Golden Anniversary, the company gives to this chronicler the privilege of taking you right in this story for a tour through the plant, which is built in the very heart of St. Louis' newest industrial district, lying over a mile west of the original B. & B. "Rope Walk" of the middle 70's.

The buildings alone occupy more than

[15]

Broderick & Bascom Rope Co.



Built for the needs of the Northwest loggers in 1907, the Seattle factory of the Broderick & Bascom Rope Co. is said to be one of the most efficiently operated plants on the West Coast.

a full city block, facing east on Union Boulevard. The factory proper, occupying the north side of the site, is 142 feet wide by 494 feet long. Foundations are concrete, to support the heavy "laying up" and "stranding" machinery. The walls are brick, floors and roof concrete. Steel trusses support the roof. Daylight floods every corner, with monitor skylight and daylight construction the entire length of the building.

South of the factory, parallel to and separated from it by a 20-foot open concrete space, is another building unit, 84 feet in width by 494 feet in length. The eastern end is of two-story construction, the second floor being occupied by the company's factory office. The lower floor comprises the warehouses for wire, finished rope, the spooling and testing department, a complete machine shop and blacksmith shop, engine room and boiler house. This building is also brick, and has concrete roof and floors and steel trusses.

Three smaller buildings occupy the south side of the site. These are the core house, carpenter shop (in which all wire rope reels are made) and the garage.

#### Shipping Facilities Are Unexcelled

A double track switch adjoins the warehouse building at the south, to [16]

facilitate the handling of raw and finished material and shipment of same, and to take care of the coal requirements.

The location of the plant on the tracks of the Terminal Railroad Association provides superior shipping facilities, because the Terminal Association owns three belt lines on each side of the river, connected by two bridges across the river. All of the railroads entering St. Louis and East St. Louis intersect and connect with these belt lines. The cars of all these railroads are available, thus furnishing ample equipment for the plant at all times.

In addition, the Mississippi River barge service is rendered at the docks served by the Terminal Association; hence, both river and rail facilities are unequaled.

Now, that the scene is laid, step inside and see the works. You will note that this is a "one-way" plant—a movement in which there are no backward steps. There are no "bottle-necks" in this road to Steady Production.

From the loading platform, the first move of the wires for Yellow Strand and other B. & B. Ropes is toward the scales. Samples are taken from the coils for analysis to determine the amount of carbon, manganese, sulphur, silicon and phosphorus contained in the wire; and also to determine the character of the

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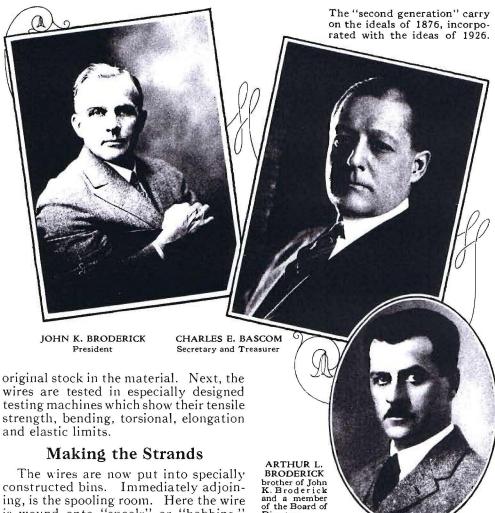
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The wires are now put into specially constructed bins. Immediately adjoining, is the spooling room. Here the wire is wound onto "spools" or "bobbins." It is then transported across the open concrete passage-way by electric power-driven lift trucks, to the stranding machines.

For a standard 6x19 wire rope, 19 of these bobbins are set into "cradles," and are guided by discs to the "stranding machine." These discs have 18 holes near the periphery and one in the center. The wires come together at a stationary die. The motor is started. The discs revolve. The 18 outer wires whirl around the center wire with infinite precision. In this manner the strand is formed.

### "Closing" the Cable

The strands, like the wires are wound onto bobbins. These bobbins are transported by electrically driven lifts to the "Closing Machine" which is simply a stranding machine on a necessarily larger scale, as the 19 (or 7 or 37) wires are here multiplied by 6 (or 8), beside the hemp core, which acts as a cushion and reservoir of lubricating material in the heart of the cable.

These thunderous machines are driven

[17]

Yellow Strand





New York and Seattle managers and many representatives of Broderick & Bascom sales force assembled in St. Louis for the 1925 Sales Convention. If you don't know one or more of these men, you ought to get acquainted.

by variable speed electric motors. Complete control of the speed of the stranding and closing machines is one of the vital factors in turning out good wire rope.

After final examination, the finished cable is conveyed to the warehouse by an electric truck specially designed for this work.

Now, let's leave the finished rope at the warehouse, awaiting orders, and step back into the "power-plant." The boiler house has a power capacity of 900 H. P. with coal bins having a capacity of 500 tons. Coal is handled with power conveyor. The engine room is equipped with 350 K. W. Hamilton Engine and Westinghouse Generators. A reserve engine and generator of equal capacity has been installed for emergency purposes. All power used is manufactured by the company.

But for one thing, this fiftieth anniversary year would be, indeed, gold with[18]

out alloy. Unhappily, it was not written in the stars, that John J. Broderick should live to celebrate the semi-centennial of the firm he founded. The company's first president left on June 7, 1919, to embark on a Great Adventure of his own.

But John Broderick left a legacy to his company—a son to carry on his name and his principles.

## "The Second Generation" Carries On

For a time, it seemed as if John K. Broderick was not going to fulfill his early promise of "comin" to work here." Having received his university degrees of A. B. at St. Louis University in 1896, and of A. M. at Georgetown University in 1897, he began the study of medicine at Beaumont College (now part of St. Louis University), receiving his M. D. degree in 1900. He completed his medical studies at the Universities of Berlin, Strasburgh and Vienna.



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Yellow Strand

The Old Guard-None of these men has been with the Broderick & Bascom Rope Co. less than forty years. Two of them have been employed by the Company since the beginning of its history.

However, John K. Broderick came back to his "first love" in 1905, starting as a salesman. He spent some time in Seattle and assisted in opening the B. & B. factory there. Upon his return to St. Louis he became sales manager.

At a board meeting in the winter following his father's death, John K. Broderick was elected president of the company. This was in 1920.

At that same board meeting, other changes occurred. Joseph D. Bascom, still active and vigorous, felt that he had earned more playtime than his active duties then permitted. After all, the days were long since past, when either the sheep of the rope-walk or the bulls and bears of Wall Street could "ball up" his wire rope business. Why not let the "boys" carry on-John's boy and his?

So it was fitting that the same board meeting which put John K. Broderick into the president's chair, made Charles

E. Bascom Secretary and Treasurer, to succeed his father. Joseph D. Bascom became Chairman of the Board.

Charles E. Bascom throughout his school life, never veered from his determination to make a life work of "learning the ropes." So that when, in 1901, he finished his studies at Yale, he promptly came in with the company, as per his youthful boast.

The mortar-board of the Yale graduate was replaced at the start, by the plain hat of a plain workman. Charles E. Bascom took his place at the splicing bench, and, under the direction of "Jumbo" Harting, chief splicer, made switch ropes for several months. Then he served successively as clerk, city salesman, buyer, advertising manager, purchasing agent and assistant secretary and treasurer.

As these words are being written, Joseph D. Bascom, the bill-clerk of 1875,

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Broderick & Bascom Rope Co. is basking in the balmy breezes of Bermuda. He said before he left: "Don't publish the Jubilee Issue of the YELLOW STRAND without letting me see it first."

So we dare not say what we should like about this pioneer of the wire rope industry. He wields a firm blue pencil. But he will permit this, we feel, for it is a fact which admits of no dispute: There is no one, in or out of business, with whom Joseph D. Bascom comes into contact who does not respond to the warmth and friendliness of his soul.

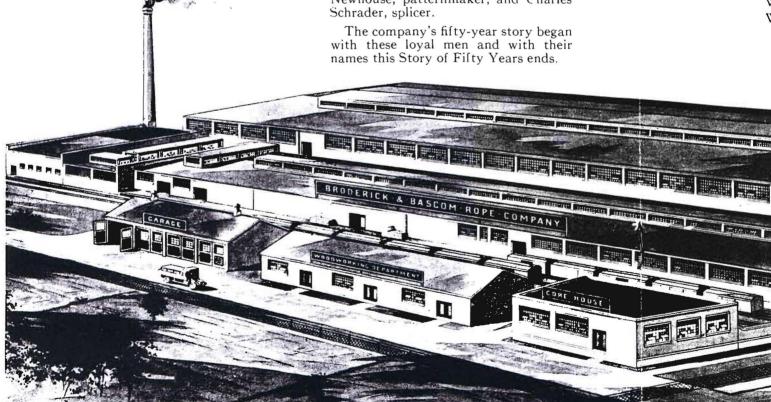
#### Loyal Men and True

Long before Mr. Bascom has read this far he will have shaken his head sadly. "To think," he will say, "that they have written pages and pages about our progress and not a line about the 'boys' who made it possible—the employees who have been with us since we started."

No, we haven't forgotten them for an instant: Not Henry Kasten, splicer, nor Billy Lange, assistant in charge of stock, both of whom started as boys in 1876. Not C. F. Ebeler, factory foreman, who began driving a one-horse wagon for the company 48 years ago. He later became a rope-making machine operator and in 1893 was given charge of the wire rope department.

Not Harting, the jumbo splicer! Who could forget of Jumbo, of the magnificent girth? Jumbo on the job since 1879! Jumbo, who, in the 80's knocked off every summer to punish the base-ball on professional teams. Jumbo, who, one memorable summer was catcher for the St. Louis Browns, themselves.

Nor have we overlooked John Broderick, shipping clerk, a cousin of President John J. Broderick, and Al Lunte, assistant shipping clerk. Forty years' service is nothing to be laughed off. Nor have we forgotten the two forty-year-men who have died in the service during the past two years—John Newhouse, patternmaker, and Charles Schrader, splicer.



A monument to fifty years' growth. New million dollar plant of the Broderick & Bascon

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Yellow Strand

## How Wire Rope Builds A Wire Rope Factory

Wire Ropes on the derricks which quarry the foundation stones.

Wire Ropes on the dredges which suck up the sand for the concrete floor.

Wire Ropes on the cranes and inclines at the limestone plant.

Wire Ropes on the tramways which ply between clay pit and brick plant.

Wire Ropes on the hoists of mines whence comes iron for the steel frame.

Wire Ropes on the car dumpers at the steel mills.

Wire Ropes on the traveling cranes which carry the molten steel.

Wire Ropes on the logging engines, which bring in the logs for all required

Wire Ropes on the carriage at the saw mill.

Wire Ropes on the cranes which load building materials to railroads.

Wire Ropes on cable street railways which hasten workers to and from their

Wire Ropes on steam shovels which break the ground.

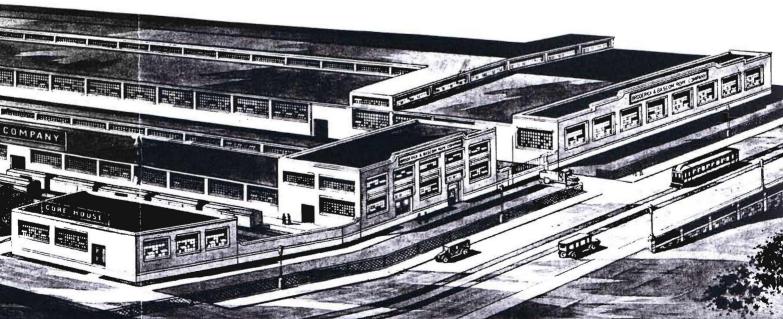
Wire Ropes on steam hammers which put down the piers.

Wire Ropes on derricks which place the steel.

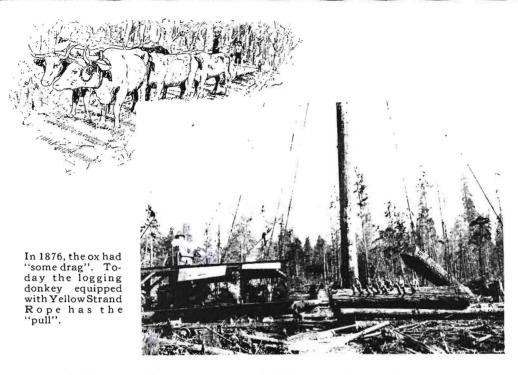
Wire Ropes on towers which "chute" the concrete.

Wire Ropes on hoists which move in the rope-making machinery.

ears ends. COMPANY



Broderick & Bascom Rope Co.



# The Ox and The Donkey 1876 - 1926

UR title savors of an Aesop Fable. At that, "fabulous" isn't so bad a word to sum up the development of the logging industry in the Northwest since 1876.

Those were the days when six or eight yokes of oxen, hitched together, patiently dragged the "yarded" logs along skid roads, to an accompaniment of good mid-Victorian oaths from the "skinner."

A complicated arrangement of pulleys, blocks and ropes "yarded" the logs to the skid road. The logs jammed stumps and roots every few feet. The system was "not so good"—kind o' hard on the manila rope.

In the early 90's a bright mind hit upon the idea of a machine to employ wire ropes. He devised a steam engine, or "donkey"—an upright spool affair, [22]

driven by a single cylinder. Another clear thinker of the Harrison-Cleveland period went him one better with the horizontally mounted drum. Since then, the "donkey" has simply taken on more drums, more power and "Powersteel."

By 1907 the demand for Yellow Strand Powersteel Rope was so great in the Northwest logging country that the only way to meet it was for us to build a factory in Seattle.

Yellow Strand Wire Ropes had quite a drag on the Roading Donkeys, which, until the era of the logging railroad, were stationed at intervals along the skid road to relay the logs to the landing. Horses were the "haulbacks." Today their "drag" is largely figurative, for the High Lead and Sky Line (overhead) systems have practically displaced ground logging.

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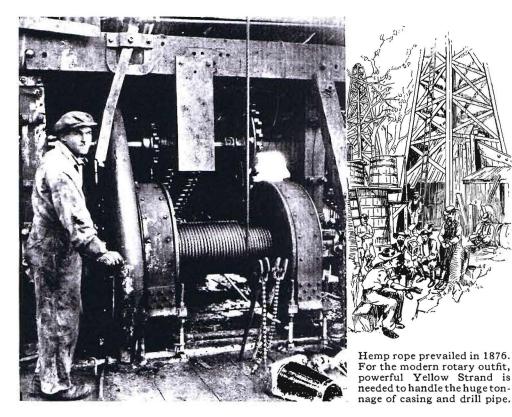
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## 1876 · · Drill, Drill, Drill · · 1926

ETROLEUM was an old story in Pennsylvania fifty years ago. The outfit of the historic Drake well, indeed, was exhibited at the Philadelphia Centennial as a relic of the "old days of '58"—the era of wild-cats, wild women and wild speculations.

If the product was "crude" in 1876, the methods of recovering it were getting less so year by year. Drake's well was only 69½ feet deep. The holes of the middle 70's were drilled as deep as 1600 feet. Drillers had learned to use torpedoes to open up hard rocks, how to "case off" the water with seed bags, how to "fish" for lost tools. Producers had tank cars, pipe lines, iron storage tanks and big and prosperous refineries.

Not yet, though, were the advantages

of wire drilling line, over the heavy, unwieldy manila rope, apparent to the drillers. They saw the light when Broderick & Bascom gave to the industry a special driller's line, soft-laid as manila, far lighter, far smaller in diameter, far stronger and "springier".

Broderick & Bascom also had the distinction of being called upon to supply special "tapered" cables for several of the historic deep holes of the country—notably the Goff and Geary wells.

Today, the "Rotary" is widely displacing the cable tool system of drilling. Here, again, Broderick & Bascom is in the forefront with a Yellow Strand Cable especially adapted to "set" and "pull", in mile-deep holes, casing which frequently weighs 30 tons or more.

[23]

Broderick & Bascom Rope Co.

# Some Constructive Stuff 1876 1926

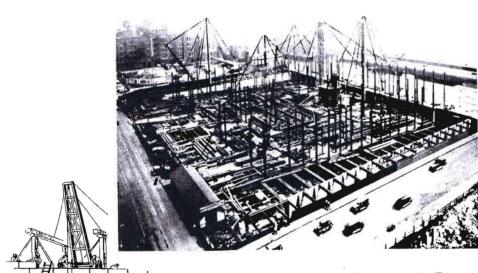
H, see the swanky hand-power derrick a-building of a house in the early Rutherford Hayes period. Who says there never was no sech animule on the job? We have the best authority for it—a contemporaneous edition of a Broderick & Bascom Catalog. It's a 30-foot derrick, says the catalog, and, with a man at each crank to manipulate the single line, its capacity is three and half tons.

This isn't intended to convey the idea that you couldn't hire a steam-power derrick for heavier loads in the 80's. You *could*. But for a fairish size brick or stone building, a hand-power derrick was "quite de rigger," so to speak.

The din and bustle of modern construction present a lively contrast to the muscular measures of the 80's. See here!

Steam shovels, harnessed with Yellow Strand Rope, gouging out great mouthfuls of earth and rock! Steam hammers equipped with Yellow Strand Rope, pounding down foundation piers! Latticed steel derricks, their Yellow Strand muscles swinging 60-ton girders! Tall towers, kept four-square to the wind with high tensile galvanized B. & B. Rope and, rolling up and down their innards, a Yellow Strand Rope bearing recurring loads of concrete!

Oh, well! Every derrick has its day.



In 1876, steel construction was not. To hoist material for an ordinary building, the hand-power derrick done its derndest. This system wouldn't have gotten rapid fire results in building, say, Chicago's new \$60,000,000 Union Station.

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1876 — Our Golden Jubilee — 1926

## 1876

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## 1876 · From the Depths · 1926

The Yellow Strand

F you think our artist has drawn a libelous picture of the mining methods of 1876, you're welcome to look through the 1882 edition of the Peoples' Cyclopedia, just as he did. The title of the picture he copied was, "Lode mining near the surface. Shaft and level."—just like that.

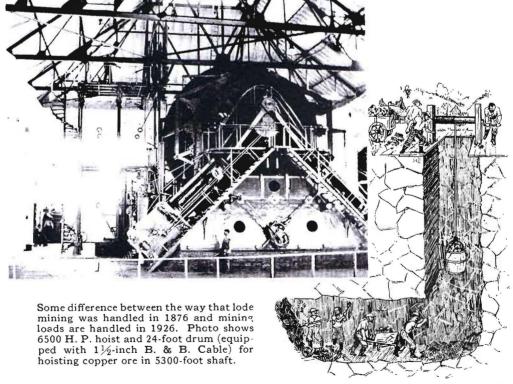
Possibly the ambitious souls shown in the picture will let a steam hoist replace the winch when they're down to a deeper level—it might save many a drop in the bucket, so to speak. And some slick salesman will probably come along shortly and sell them on the idea of installing one of these here new 1876-model tram-cars to take the place of the wheelbarrow. Possibly, too, the candles which you see on the walls, will give place to

the newer and safer miner's oil lamps.

Even so, 'twill be a far cry to the electric hoists, electric locomotives, electric drills, electric tipples, electric crushers and other such taken-for-granted paraphernalia of a super-modern ore mine.

Since 1876, B. & B. Wire Ropes have been hoisting coal and ore and men from the depths. And don't you forget that it is the skip-hoist cable which plays the leading role in the Safety First program of any mine.

Among other places, B. & B. Ropes have plumbed the depths of the deepest copper mines in the Lake Superior Country, one of these shafts reaching the amazing depth of over fifty-three hundred feet.



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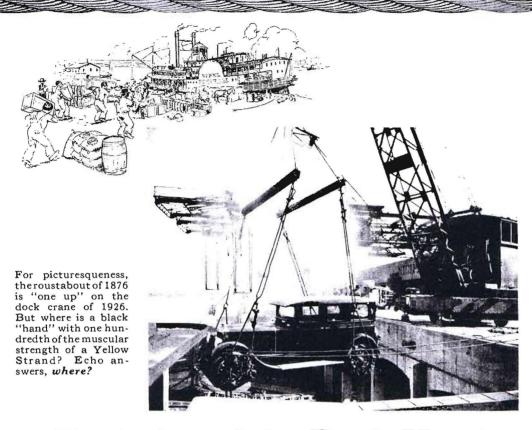
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# Evolution of the Dock Hand 1876 · · 1926

INGING of hoofs and rattle of wheels on cobblestones. Forest of smoke-stacks along the river. Bales and bales o' cotton. Bar'ls and bar'ls o' sorghum. Boxes and crates. Tin bath tubs and lead pipes. Gunny sacks, parlor sets, green and red plows.

Steamer belching smoke and whistling impatiently. Mate fuming. Dock boss swearing. A confusion of brawny brown arms, wooly black pates, sweating bodies and shuffling legs in ragged pantaloons. Snatches of song. Grunts. Groans. Straining muscles. "Freight a-bo-o-ard!" Cranes and derricks were there for the overloads, it's true, but muscles were cheaper in 1876.

Today's dock'hands'are'arms''—the owned docks from coast to coast. [26]

long arms of powerful cranes, equipped with B. & B. Wire Ropes. Nothing less than its steel muscles will do. They have to bear the weight of 50 years' progress, you know—the 45-ton castings of the generator for a \$50,000,000 power project, a bargeload of motor cars, a 40-ton Diesel Engine for a submarine, an aeroplane for a North Pole flight, linotypes for the composing room, player pianos for the living room—truly the white man's progress and the Yellow Strand's strength have relieved the black man's burden.

Yellow Strand Ropes are hard at work at Municipal Docks, United States Ports and Harbors, and hundreds of privately owned docks from coast to coast.

1876 — Our Golden Jubilee — 1926



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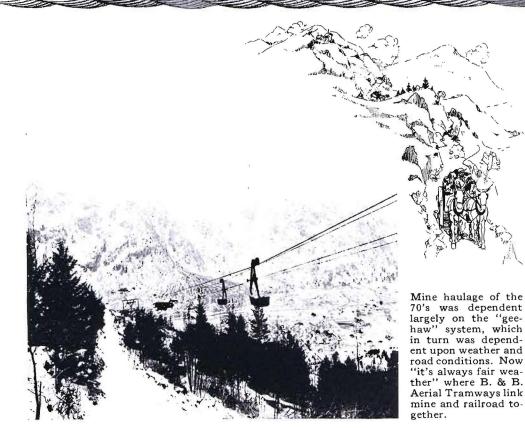
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# Over the Hills to the Railroad 1876 + 1926

VERHEAD," as a business term, meant nothing in the young life of a mine operator in 1876. If he had been told that his haulage "overhead" was outrageous, he'd very likely have replied: "Aw, g'wan. We got mule teams—we ain't hauling overhead. But derned if I don't sometimes think we'd be better off if we was."

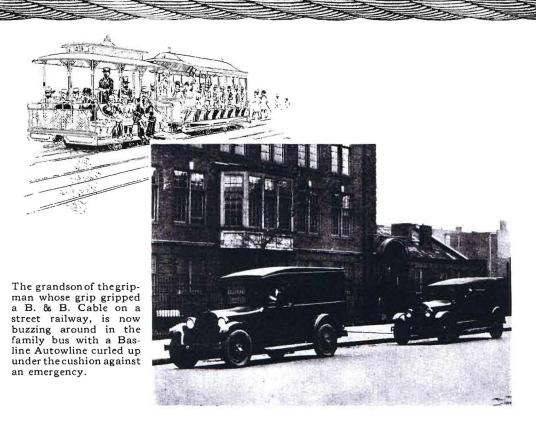
A number of progressive mine operators of 1876 were already employing aerial haulage and reducing their "overhead" thereby, even though wages were low, and mules and feed and stabling were cheap. They found that aerial tramways saved that precious commodity, time, since no condition of weather

or road could impede their operation in any way.

The convenience of 1876 is become the necessity of 1926. Today there are tens of thousands of miles of aerial tramways helping keep a steady stream of ore and coal flowing between mine and mill or railroad. They've been "trained" to climb hills, turn corners, dump where you tell 'em to, close gates after themselves and perform divers other fancy stunts.

If you are in doubt as to the origin of the expression: "Putting things over successfully," just watch a Broderick & Bascom Aerial Tramway in operation sometime.





# 'Round the Town with a Cable 1876 1926

AVE a look at "us moderns" of 1876. We scorn the lowly mule car, we do. We tour the city in the new-fangled cable car, a marvelous invention, my dear.

Just peep through that slot between the tracks and see how fast the cable down there is traveling. Well, when the gripman grips the gripper on the gripcar, the gripper grips the cable—and along we go, full speed ahead.

At the time the Broderick & Bascom Rope Co. was organized, the cable car system was in the ascendant. The first line was established in San Francisco in 1873. The longest, heaviest cables ever turned out by our factory were built for these street railways. (See page 9).

While the electric car has long since superseded the cable car almost everywhere, and the bus has come along to supplement the electric, Yellow Strand cables still aid transportation in big and little cities and on all roads leading from hence hither, thus:

Quarter-inch Yellow Strand cables are now cut into short lengths and a stout hook is attached to either end. Thus equipped, they're re-christened "Basline Autowlines", the first, best known and most popular wire rope towline ever made. If all the motor cars that Basline Autowlines have pulled out of trouble in the past 15 years, were to toot their horns for their savior, pandemonium would reign over 48 states.

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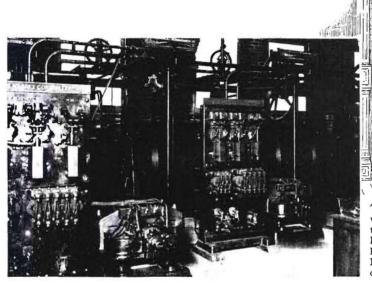
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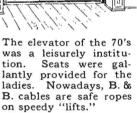
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48 states.







## A Half Century of Ups and Downs 1876 - 1926

served a St. Louis newspaper, in January, 1875, "is provided with one of those modern conveniences known as an elevator. Last night the conductor placed upon the vestibule wall of his domicile, so to speak, a hand bill printed in appropriate job type, containing the following address to his patrons:

Up and down, up and down, All day long I'm going; Ans'ring questions, directing persons To the floors that they are going. Gentlemen, bring all your friends, As you have no fare to pay, Come and give me a call Especially on New Year's Day.

There you have a picture of the leisurely 70's—the hand-operated elevator-hemp-spun cables-home-spun verses—a "conductor" rich with the traditional verbiage and abundant herbage of the Ulysses Grant era.

THE Republican Building," ob- lightning speed up and down its shaft, controlled by the light touch of a bobbed-haired Sheba and by a set of dependable B. & B. steel cables. As for holiday poetry to elevator patrons, pouf! Sheba's system of expressing the Christmas spirit is far, far simpler. To the grille-work of her cage, she fastens a holly-decorated box with a yawning slot cut into it. Only this and nothing more.

> B. & B. Elevator Cables spell safety for the tenants of, and visitors in thousands of skyscrapers all over the country.

Our own city provides a conspicuous example of the stamina of B. & B. Traction Steel Elevator Ropes. These cables were installed in the 21-story Railway Exchange Building in May, 1913, in all 18 elevators. None was renewed until December, 1919. In July, 1925, two sets of the original cables remained in service. The last set was removed in Feb., Today, the "electric" glides with 1926—nearly thirteen years on the job.



## in Lea

- 5. The YELLOW ST devoted exclusively to The first issue, Oct., 1 no cover. The public over 20,000 a month.
- 6. Yellow Strand Win Osborn, Ohio, (200 be new site.
- 7. Yellow Strand Wir in Honolulu Harbor ropes had parted.
- 8. Yellow Strand (Expression of the previous records for unat Panama Canal.
- 9. B. & B. Tapered S Geary well of the Peop



## rship

Rope helped build the foundations, up.

f Yellow Strand Rope. is set is a never-failing y national expositions

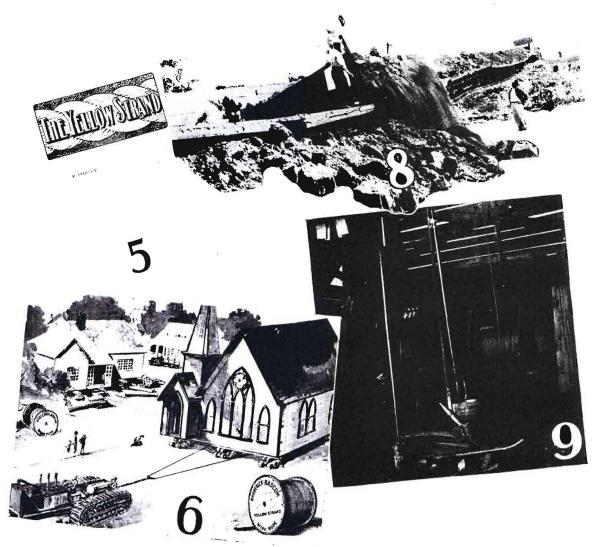
captured the highest siana Purchase Exposid Clark Exposition at Exposition at Sandded to the collection Exposition at Seattle. System captured the Purchase Exposition at the Lewis and Clarkines and Powersteel chals at the Panama-

# in Leadership

- **5.** The YELLOW STRAND was the first magazine devoted exclusively to the interest of wire rope users. The first issue, Oct., 1904, contained eight pages and no cover. The publication now has a circulation of over 20,000 a month.
- **6.** Yellow Strand Wire Rope moved an entire town, Osborn, Ohio, (200 buildings) a mile and a half to a new site.
- 7. Yellow Strand Wire Rope held a sunken submarine in Honolulu Harbor for a full week, after all other ropes had parted.
- **8.** Yellow Strand (Brobas) Wire Rope broke all previous records for unloading excavated dirt and rock at Panama Canal.
- 9. B. & B. Tapered Steel Cables drilled the famous Geary well of the Peoples Gas Co., 7248 feet deep.







# "Golden" Greetings

IN 1876, the Broderick & Bascom Rope Company had few distributors. Then, as now, the company's policy was to seek connections only with supply houses of indisputable integrity. That the effort has been successful, is proved by the list of names inside the back cover of this magazine. Some of these firms actually ante-date the Broderick & Bascom Rope Co., others are newly established, all subscribe to the business "Code of Reliability." Beside the companies listed, the Broderick & Bascom Rope Co. has representatives throughout the world.

The following are typical of the Golden Jubilee Greetings which have poured in from distributors:

### THE M. I. WILCOX COMPANY Toledo, Ohio

Gentlemen: We understand that 1926 will be the Fiftieth Anniversary of your business, and while our records do not tell when we first started to buy wire rope from you, we believe that we have been your customers through practically all of these fifty years.

We wish you many more years of prosperous business. It has been a great pleasure to be associated with you, and in all these years our business relations have been more than satisfactory in every way.

THE M. I. WILCOX COMPANY, (Signed) C. J. STANLEY,
General Manager.

## SOMERS, FITLER & TODD COMPANY Pittsburgh, Pa.

My Dear Mr. Bascom: Permit me to congratulate you and your associates on your Fiftieth Anniversary. Our company has been handling your rope ever since their organization in 1893, and we hope will continue to do so for as many years longer.

We compliment you on the position which you have attained in the wire rope industry and know it has been reached by the quality of the product you have been manufacturing.

We wish you still further successes.

Somers, Fitler & Todd Co., (Signed) William T. Todd, Jr.,
Sales Manager.

#### L. G. ISAACSON COMPANY Aberdeen, Washington

GENTLEMEN: Twenty years ago when I cast my lot with Broderick & Bascom it was not so easy to sell Yellow Strand. But as improved machinery imposed more severe duty, the buyer of wire rope specifies Yellow Strand or equal—we have not yet found the "equal." May the joy of achievement be yours on this fiftieth anniversary.

Cordially yours,

L. G. ISAACSON COMPANY, (Signed) L. G. ISAACSON.

#### WALDO BROS. AND BOND COMPANY Boston, Mass.

GENTLEMEN: We have sold the Broderick & Bascom Rope Company ropes for about twenty-five years and commenced in a small way. We have increased our business to a considerable extent, in fact, Broderick & Bascom Rope in New England and in metropolitan Boston is very favorably known. Since the introduction of steam shovels we find that most of our contractors in and around Greater Boston are calling for Yellow Strand Rope.

Very truly yours,

Waldo Bros. & Bond Company, (Signed) A. B. Parker, Department Manager.

## THE CHAS. A. STRELINGER CO. Detroit, Mich.

DEAR MR. BASCOM: Your Fiftieth Anniversary is at hand. Your company has turned the half century mark. It is a great honor to have been in business so long.

We extend to you our sincere and hearty congratulations, and, if honest dealing, generous policy and products of excellent quality contribute to longevity in the business world, then your company is destined to operate for another fifty years and indefinitely.

Yours sincerely,

THE CHAS. A. STRELINGER Co., (Signed) D. C. HENDERSON.

## BARCLAY, AYERS & BERTSCH CO. Grand Rapids, Mich.

Gentlemen: We understand that 1926 will be your fiftieth anniversary, and we want to congratulate you on your success in wire rope.

We have been selling your rope exclusively for a good many years and have had very good success with it. Your rope runs very uniform and has given excellent satisfaction. We hope you will continue for another fifty years. Kindest regards.

Yours very truly,

BARCLAY, AYERS & BERTSCH Co., (Signed) C. H. BERTSCH, President.

## Fror

THE REPUBLIC Los An

GENTLEMEN: We under your Fiftieth Annivers cept our heartiest cong

Our distribution of B nia oil operators during one of the outstanding business.

The high standard o tained in your product for exclusive use by ma panies.

We trust this annive ing year, may bring to deserve through your manufacture of a wire r

Yours

#### CANTON HAR Can

GENTLEMEN: We assu business with a concer years, everything being We assure you we hope continue for many year

We extend to you or

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GENTLEMEN: The servin the years that have appreciated, and we with your good firm.

It is not only a delig business dealings with

Wishing you prosper

Yours

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B. Parker,
Department Manager.

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## k BERTSCH CO.

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r rope exclusively for a had very good success uniform and has given pe you will continue for it regards.

ily, Ayers & Bertsch Co., H. Bertsch, *Presideni.* 

# From Old Friends

## THE REPUBLIC SUPPLY COMPANY Los Angeles, Calif.

Gentlemen: We understand this year represents your Fiftieth Anniversary in business. Please accept our heartiest congratulations.

Our distribution of B. & B. Wire Rope to California oil operators during the past seven years has been one of the outstanding factors in the growth of our business.

The high standard of quality continuously maintained in your product has fully justified its selection for exclusive use by many leading California oil companies.

We trust this anniversary year, and each succeeding year, may bring to you the success you so well deserve through your aggressive effort toward the manufacture of a wire rope of quality second to none.

Yours very truly,

THE REPUBLIC SUPPLY Co., (Signed) P. M. Pike, President.

#### CANTON HARDWARE COMPANY Canton, Ohio

1-4.5

GENTLEMEN: We assure you it is a pleasure to do business with a concern such as yours for so many years, everything being so satisfactory in every way. We assure you we hope these pleasant relations will continue for many years to come.

We extend to you our best wishes.

Yours truly,

THE CANTON HARDWARE COMPANY, (Signed) H. L. ARCHIVAL.

## LaPLANT-CHOATE MFG. CO. Cedar Rapids, Iowa

Gentlemen: The services that you have rendered in the years that have gone by have been greatly appreciated, and we certainly intend to continue with your good firm.

It is not only a delight but a satisfaction to have business dealings with a firm of your character.

Wishing you prosperity, I remain,

Yours very truly,

LaPlant-Choate Mfg. Co., (Signed) R. E. Choate.

#### JOHN A. GRANGER & SONS CO. Chicago, III.

Gentlemen: We take this opportunity of congratulating your company upon the advent of your Fiftieth Anniversary.

It has been indeed a pleasure to have been linked with your company as a distributor of Yellow Strand Powersteel in the Chicago market, and we trust that we have proven ourselves worthy of your confidence and consideration. We feel it a privilege to continue these relations, and we hope that it may go on from year to year.

We are 100% loyal to your cause and to your organization, seeking at all times to protect and promote your interests which is our own interest.

Very respectfully yours,

John A. Granger & Sons Co., (Signed) J. A. Granger.



## HIDE LEATHER & BELTING COMPANY Indianapolis, Ind.

Gentlemen: We congratulate you on the completion of fifty years of successful business. We are entering our fifty-sixth year.

Our relations with your company during the past years have been very satisfactory, and we think a great deal of the Broderick & Bascom Company, also their products.

We wish for your company many more years of prosperity.

Very truly yours,

HIDE LEATHER & BELTING Co., (Signed) A. G. SNIDER,

President.



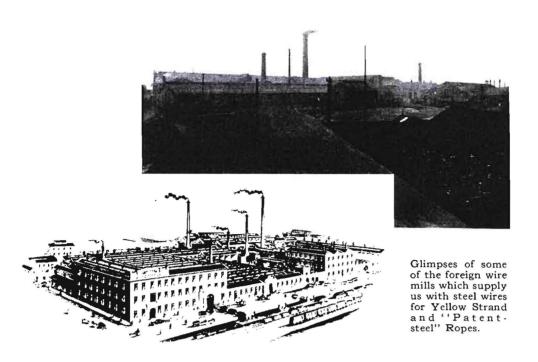
## E. C. ATKINS & COMPANY Memphis, Tenn.

GENTLEMEN: For your Fiftieth Anniversary, the full year of 1926, we wish for you Health, Happiness and Prosperity, and a Very Successful Business Year. May the orders pile in Hand over Fist.

We certainly appreciate the Broderick & Bascom Wire Rope agency, and we hope that we can hand you a very large amount of business during the year.

Yours truly,

E. C. Atkins & Company, Inc., (Signed) B. M. Gladding, Sales Manager.



## Our Friends

These Letters from the Master Craftsmen

FREDERICK SMITH & CO. Wire Manufacturers Limited Caledonia Works, Halifax, England

Gentlemen: We understand that 1926 is the anniversary of the birth of your celebrated firm and we congratulate you upon your wonderful success.

We have had the pleasure of doing business with you for about 40 years, the writer, Sir George H. Fisher Smith, being personally acquainted with all the members of your firm. We realize that the great success you have attained in the manufacture of wire ropes is due to the fact that you have always had one object in view, that being to produce quality second to none and superior to all. In order to do so you have always insisted upon being supplied with the very best quality Steel Wire.

We have always worked to your special specification and supplied the finest wire and the highest grade that can possibly be produced. This you used in your Yellow Strand and Patentsteel Ropes.

In order to produce these high grade wires we have had to use the very finest steel that can be obtained. It is well known that Swedish ore is the purest and the highest quality in the world and this high grade ore has formed the basis of the steel for your wire.

Naturally the material and production is higher in cost than wire produced from lower qualities of stock, but you have realized that the only way to obtain a high reputation is to use a higher class of material, notwithstanding the necessary extra cost entailed in

doing so. Your wonderful reputation and great success have shown the wisdom of this policy.

It is with the greatest sincerity that we again congratulate you upon the 50th anniversary of your wonderful business, resulting from great technical knowledge, industry, perseverance and a determination not to encourage mass production of inferior quality but to cultivate a reputation for producing the highest quality steel wire rope.

Frederick Smith & Co., Wire Manufacturers, Limited. (Signed) Sir George H. Fisher Smith, Director.

#### E. & A. SMITH & CO., LIMITED Wire Manufacturers Cleckheaton, Yorks, England

GENTLEMEN: Please accept our heartiest congratulations on your Fiftieth Birthday.

For forty of these fifty years we have been doing a regular and expanding business. In this time you have given us the opportunity of showing craftsmanship in improving the quality of wire that time and knowledge have brought. You have always asked for our best, which we have endeavored to give.

In these years we find that we have shipped to you about 150,000,000 pounds of wire. On analyzing the quality supplied, we find that it has always, throughout the years, been on the up grade; from ore to wire



Photo at right shows section of billet mill where ingots of Sheffield Steel are rolled into billets.

## Acros

of Wire Drawing Sp

the greatest possible ca possible quality and pu We sincerely hope the possible, cement furthe that our firm possesses.

For Sign

## THE LONGFORD Warrings

DEAR SIRS: We wish to gratulations on your fif For many years now

with our wire, from the your "Yellow Strand P. The agreeable busine: afford us the great satis fidence that same will c this opportunity of assibe our aim to maintain

we believe is the founda

As you are aware, for quality of raw materia. Swedish Acid Steel that not depart from this praial, combined with our ment process, and the gives us confidence that assist you to maintain



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e rope. Ick Smith & Co., Manufacturers, Limited. Orge H. Fisher Smith,

SHER SMITH, Director.

## CO., LIMITED acturers orks, England

our heartiest congratuhday.

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we have shipped to you wire. On analyzing the tit has always, throughgrade; from ore to wire



## Across the Sea

of Wire Drawing Speak for Themselves

the greatest possible care is exercised—the highest possible quality and purity maintained.

We sincerely hope that the next fifty years will, if possible, cement further the happiest business ties that our firm possesses.

FOR E. & A. SMITH & Co., LTD., (Signed) SYDNEY SMITH.

## THE LONGFORD WIRE CO., LIMITED Warrington, England

DEAR SIRS: We wish to offer you our sincere congratulations on your fiftieth anniversary.

For many years now we have been supplying you with our wire, from the highest grade materials, for your "Yellow Strand Powersteel" Ropes.

The agreeable business relations that have existed afford us the great satisfaction. We have every confidence that same will continue, and we wish to take this opportunity of assuring you that it will always be our aim to maintain the standard of quality which we believe is the foundation of mutual confidence.

As you are aware, for your wire we only use one quality of raw material, the very highest quality Swedish Acid Steel that we can obtain, and we shall not depart from this practice. The use of this material, combined with our latest improved heat treatment process, and the skill of our technical experts, gives us confidence that we shall always be able to assist you to maintain the standard of excellence

which we have always understood your ropes have attained in the United States of America.

Wishing you every success in the future, we are,

THE LONGFORD WIRE CO., LTD.,
(Signed) OWEN WOODS,

Assistant Managing Director.

## THE DONCASTER WIRE CO., LTD. Doncaster, England

Dear Sir: Congratulations on your 50th anniversary. We, as an offspring of our parent firm, E. & A. Smith & Co., Ltd., are approaching our 25th. During the past 24 years, we have supplied to you large quantities of our best English quality patent steel rope wire. This wire is made from Sheffield Steel specially produced for us, and which, after we have drawn into wire, must successfully emerge from exacting tests in the most efficient testing apparatus. Having one of the most extensive works' labora-

Having one of the most extensive works' laboratories in this country, we are always endeavoring to effect any possible improvement which highly skilled metallurgists can discover.

Knowing the care and efficiency you use in making the finished rope, we have no hesitation in saying that "YELLOW STRAND" is second to none.

We wish you every prosperity in the next half century.

THE DONCASTER WIRE CO., LTD., (Signed) ENOS SMITH, JR., Director.

# YELLOW STRAND

#### PHOTOGRAPH YOU TAKE





-This photo was made possible by a Nobel deed of 1866 and a wise deed of 1876, the respective years in which Alfred Nobel invented dynamite, and Broderick & Bascom began making wire rope.

Yellow Strand Rope drilled the multitude of holes for the charges of dynamite which blew out 150,000 tons of rock in one shot for the Columbia Quarry Co., Krause, Ill. Yellow Strand cables are used also on their steam shovels and car dumpers.

The steam locomotive crane of 1876 wasn't bad in its way, but its "weigh" wasn't much compared to the 1926 edition. See the huge Kelly-Atkinson Construction Co's. No. 18 Derrick Car, on the job of setting steel for the new Chicago Union Station train sheds. This husky brute, built by the Cullen-Friestedt Co., of Chicago, is 42 feet long, weighs 160,000 pounds, rigged for work, and its capacity (with a 40-foot boom out at 45 degrees) is 50 tons. It is a triple-drum machine, operating three independent sets of blocks and falls—Yellow Strand is on all of them. B. & B. Plow Steel lines are used for the back guy lines. Cables bought through John A. Granger & Sons Co., Chicago.

What is believed to be the largest steel derrick in or near Boston, is operated by A. Beatrice & Sons, at their sand and gravel plant, Newton Lower Falls, Mass. The mast is 115 feet tall and the boom is 100 feet long. Material is handled with a 1½-yard clamshell bucket—and ½-inch Yellow Strand. The mast is kept rigid with 2100 feet of B. & B. guy rope. All cables bought through Waldo Bros. & Bond Co., Boston, Mass.

 $T_{
m photo}^{
m AKE}$ , or have taken, a photograph showing Yellow Strand Powersteel or some other B. & B. Wire Rope in actual use. Send it to us. If we reproduce it on these center pages—you will re-ceive \$5. And you'll be paid \$10 if the photograph you send is used on the cover design. For every issue of The Yellow Strand we need good clear photographs. Even small "snap shots" can be used if the detail is clear. A photograph may not be available for a cover design or for these prize photograph pages, and still have cash value. If we use it elsewhere in this magazine we will pay you a fair price for it.

Be sure to send a complete description with each picture—be "dead sure" it is a photograph of some kind of Broderick & Bascom rope. State where the wire rope is used, by whom and for what purpose. Don't fail to state its size, its brand, and where it was bought-the last is very essential.

 $T_{
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# AND PRIZE PICTURES

GRAPH AND WIN \$5.00 OR \$10.00



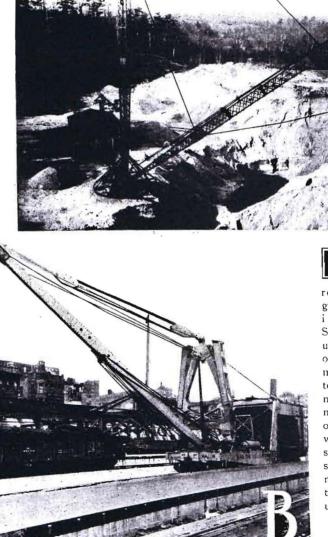
YELLOW STRAND since the issue of December, 1906.
Remember: "A
B. & B. Wire Rope on a photo means a green-back in your bill-fold."

 $T^{
m HIS}$  offer has appeared con-

tinuously in THE

AKE, or have taken, a photograph showing llow Strand Powersteel or ne other B. & B. Wire Rope actual use. Send it to us. we reproduce it on these nter pages-you will reve \$5. And you'll be paid
0 if the photograph you
1d is used on the cover den. For every issue of THE ELLOW STRAND We need od clear photographs. Even ed if the detail is clear. A otograph may not be availle for a cover design or for ese prize photograph pages, d still have cash value. If use it elsewhere in this igazine we will pay you a r price for it.

Be sure to send a complete scription with each picture be "dead sure" it is a otograph of some kind of oderick & Bascom rope, ate where the wire rope is ed, by whom and for what rpose. Don't fail to state size, its brand, and where was bought—the last is ry essential.



N MOST INstances, information regarding photographs published in THE YELLOW STRANDisfurnished us by those outside our business. We make every effort to verify all information thus furnished. If our records show that our wire ropes were sold to the persons mentioned, we naturally assume that the ropes were used as stated.

## Old Yarns Respun

NOTE:—For this special Jubilee Issue we have gathered together a hank of yarns, so worn with age that we tremble to spin 'em again. However, you'd be surprised what a strong fabric of friendship can be knit from Old Yarns. Hundreds of buyers of Yellow Strand Rope first made the acquaintance of this amazingly strong cable through the medium of a Yellow Strand Paperweight, which has been a popular souvenir for over a quarter of a century, and for twenty-two years has been offered to contributors of jokes for this page.

#### OLD SONGS RESUNG

One: "I just passed by the ex-Kaiser's home and heard him singing."

Two: "What was he singing?"
One: "Ain't gonna reign no mo'!"

S. MELKISETHIAN,

Fitchburg, Mass.

B. & B. Wire Ropes have shown contractors their "metal" for 50 years.

#### FLEES FROM OLD JOKE'S HOME

A village girl eloped in a suit of her father's clothes. The next day the "News" came out with this sensational headline:

"Flees in Father's Pants."

MISS EDNA MAY DOUGLAS, High Point, N. C

Only worthy cables can sustain a 50 years' span in the Bridge of Time.

#### AGE CANNOT WITHER

At a Boston Immigration Station one blank was recently filled out as follows:

Name: Abraham Cherowsky.

Born: Yes. Business: Rotten.

The New York Tribune adds: The joke in the preceding is the word "recently."

C. D. WINTERS, Wernersville, Pa.

1876—Fifty years of knowing the ropes—1926.

#### UNCLE OSCAR TOLD THIS ONE

Einstein: I want some powder.

Salesman: Mennen's? Einstein: No, vimmen's.

Salesman: Scented? Einstein: No, I vill take it

mit me.

EDW. A. VOGEL, Milwaukee, Wis.

#### DID YOU EVER HEAR IT?

Mr. Newlywed: "I wish to surprise my wife with a blouse for her birthday. One such as you are wearing would do nicely."

Saleslady: "What bust?"

Mr. Newlywed: "I didn't hear anything."

R. SMITH,

Hackensack, N. J.

1876—Strong friendships are strong proofs of strong ropes—1926.

#### WE'RE "CALLOUS" TO THIS

Letter received by a company which manufactures corn syrup: "Though I have taken six cans of your corn syrup, my feet are no better than when I started."

HARRY WILLIAMS,
Wilmington, Del.

1876, cables for street cars. 1926, cables for aeroplanes. Time flies.

#### VINTAGE OF 1898

Having received a very sarcastic letter, the correspondent wrote the following in answer:

"My stenographer being a lady, I cannot say what I would like to. I being a gentleman, wouldn't say it anyway. But you, being neither, know exactly what I

COLONIAL SAND & STONE CO., New York, N. Y.

Follow the Golden Rule for 50 years and you arrive at a Golden Jubilee.

#### THIS IS A SLICK ONE

An officer was showing an old lady over the battle ship. "This," said he, pointing to an inscribed plate on the deck, "is where our gallant captain fell."

"No wonder," replied the old lady. "I nearly slipped on it my-self."

SAM G. KERWOOD, St. Marys, W. Va.



## FREE

Yellow Strand Paper-Weight awarded for all contributions to this page that we publish. Send us a good article clipped or original. You realize that our space is limited. We cannot possibly print all the jokes we receive.

[38]

1876 — Our Golden Jubilee — 1926

The

Elba, Dorsey Bi Mobile, Standa Selma, The Uni

gi

Fort Smith, Bru Little Rock, Ce Pine Bluff, Ark Smackover, Re

Los Angeles, Ti Special I Branche Los Angeles, W San Francisco,

Wilmington, D

Dunnellon, Du Jacksonville, T Jacksonville, Pi Lakeland, Flori Miami, Frank

Albany, Georgi Columbus, Ton Macon, J. S. So Savannah, Pier

Chicago, John A Peoria, Couch & Rockford, Swor

Evansville, Hid Indianapolis, H South Bend, So

Cedar Rapids, Sioux City, The Waterloo, Arms

Chanute, The S Chanute, The S Eureka, Driller Paola, Staves S Winfield, D. F.

Harlan, Kentuc Hazard, Sterlin Hopkinsville, C Paintsville, Mc

New Orleans, C New Orleans, F Shreveport, Re

Boston, Waldo

Detroit, The C Grand Rapids,

Duluth, Nation Duluth, Wm. F Minneapolis, W St. Paul, R. B.

Jackson, Missis Meridian, Scule

## These Firms Carry Our Ropes

All grades, sizes and lengths of B. & B. Wire Ropes may be secured from the following firms. Not only will these distributors give you prompt service, but they will lend you every aid in seeing that you get the one right rope for the required purpose.

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anything." Ή, kensack, N. J.

are strong

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WILLIAMS, ilmington, Del.

1926, cables

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AL SAND & v York, N. Y.

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LICK ONE

showing an old le ship, "This,"

to an inscribed

replied the old pped on it my-

KERWOOD, Marys, W. Va. ALABAMA

Elba, Dorsey Brothers Mobile, Standard Equipment Co. Selma, The Union Iron Works Co.

ARKANSAS Fort Smith, Bruce-Rogers Co. Little Rock, Central Supply Co. Pine Bluff, Arkansas Mill Supply Co. Smackover, Republic Supply Cc.

CALIFORNIA

Los Angeles, The Republic Supply Co. of Cal.,
Special Distributors of oil field ropes.
Branches in all California oil fields.

Los Angeles, W. H. Worden Co., General Distributors
San Francisco, W. H. Worden Co., General Distributors

DELAWARE Wilmington, Delaware Electric & Supply Co.

FLORIDA Dunnellon, Dunnellon Supply Co.
Jacksonville, The S. B. Hubbard Co.
Jacksonville, Pierce, Butler & Pierce Mfg. Co.
Lakeland, Florida Machinery and Supply Co.
Miami, Frank T. Budge Co.

GEORGIA Albany, Georgia Mill Supply Co. Columbus, Tom Huston Manufacturing Co. Macon, J. S. Schofield's Sons Co. Savannah, Pierce, Butler & Pierce Mfg. Co.

ILLINOIS Chicago, John A. Granger & Sons Co. Peoria, Couch & Heyle, Inc. Rockford, Swords Brothers Co.

INDIANA Evansville, Hide Leather & Belting Co. Indianapolis, Hide Leather & Belting Co. South Bend, South Bend Supply Co.

IOWA
Cedar Rapids, La Plant-Choate Manufacturing Co.
Sioux City, The Sioux City Iron Co.
Waterloo, Armstrong Manufacturing Co.

KANSAS
Chanute, The Star Drilling Machine Co.
Chanute, The Western Drilling Tool & Supply Co.
Eureka, Drillers' Supply Co.
Paola, Staves Supply Co.
Winfield, D. F. Connolly Agency, Inc.

KENTUCKY Harlan, Kentucky Mine Supply Co. Hazard, Sterling Hdw. Co. Hopkinsville, Cayce Mill Supply Co. Paintsville, McJunkin Supply Co.

LOUISIANA New Orleans, Globe Supply & Machinery Co. New Orleans, R. H. Young Co. Shreveport, Republic Supply Co.

MASSACHUSETTS Boston, Waldo Bros. and Bond Company

MICHIGAN
Detroit, The Chas. A. Strelinger Co.
Grand Rapids, Barclay, Ayers & Bertsch Co.

MINNESOTA Duluth, National Iron Co.
Duluth, Wm. H. Ziegler, Co., Inc.
Minneapolis, Wm. H. Ziegler Co., Inc.
St. Paul, R. B. Whitacre & Co.

MISSISSIPPI Jackson, Mississippi Foundry and Machine Co. Meridian, Scule Steam Feed Works

MISSOURI Joplin, Peerless Machinery Co. Springfield, Schweitzer Brothers ST. LOUIS, Broderick & Bascom Rope Co.

MONTANA Butte, Western Supply Co.

NEBRASKA Beatrice, Dempster Mill Mfg. Co.

NEW YORK NEW YORK CITY, BroderIck & Bascom Rope Co. 76 Warren St. Rochester, Barr & Creelman Mill and Plumbing Supply Co.

NORTH CAROLINA Greensboro, E. F. Craven.

OHIO Akron, The Star Drilling Machine Co. Canton, Canton Hardware Co. Cincinnati, Vulcan Copper & Supply Co. Cleveland, Day & Maddock Co. Dayton, M. D. Larkin Supply Co. Marietta, American Iron & Supply Co. Toledo, The M. I. Wilcox Co.

OKLAHOMA
Oklahoma City, Mideke Supply Co.
Tulsa, D. F. Connolly Agency, Inc.
(Branches: Bristow, Shidler, Tonkawa.)
Tulsa, Republic Supply Co.
(Branches: Duncan, Wilson, Yale, Beggs, Shidler, Bristow, Tonkawa, Slick, Wewoka, Hominy, Okemah, Garber.)

OREGON Marshfield, Baker-Isaacson Rope Company Portland, Stewart Bros. Co.

PENNSYLVANIA Bradford, Bovaird & Co. Pittsburgh, Somers, Fitler & Todd Co. Washington, Davin Tool Company

SOUTH DAKOTA Sioux Falls, Western Material Co. TENNESSEE Memphis, E. C. Atkins & Co

TEXAS
Amarillo, Dempster Mill Mfg. Co.
Austin, Walter Tips Company
Fort Worth, Axtell Co.
Galveston, Black Hardware Co.
Houston, Republic Supply Co.
(Branches: Wortham, Corsicana, San Antonio, Wichita Falls, Breckenridge, Olney, Burkburnett, Electra, Ranger.)
Houston, Wilson Supply Co.
Moran, Armstrong Mfg. Co.
San Antonio, Krueger Machinery Co.
San Antonio, Wilson Supply Co.
Sour Lake, Rex Supply Co.
Tyler, Walter Connally Co. TEXAS

VIRGINIA Norfolk, Taylor-Parker Company, Inc.

WASHINGTON
Aberdeen, L. G. Isaacson Co.
Raymond, Foster-Isaacson Co.
SEATTLE, Broderick & Bascom Rope Co.
Seattle, W. J. Brett Co.
Spokane, Hofius-Ferris Equipment Co.
Spokane, Union Iron Works

WEST VIRGINIA Charleston, Baldwin Supply Co. Charleston, McJunkin Supply Co. Morgantown, Monongahela Supply Co. Parkersburg, Parkersburg Supply Co.

WYOMING Casper, Petroleum Specialties Co.