VIEWS AND INTERVIEWS.

The reply of Daniel Webster to the

It is not alone men who are lost in

Success young man who sought his advice as on Top. to taking up law has often been "Yes," said the learned jurist, "there's lots of quoted. room on top." How to get there is the bother with many men in various callings. "On every side," some one has said, "we see the plodding masses following in the old rut, each contending with his neighbor for the scanty herbage within reach of the well-beaten pathway, while just beyond, on either side, are pastures fresh and green. Originality is the ladder which affords an escape from this old rut, which is being worn deeper every day by a constantly increasing stream of plodding, grovelling, mediocre humanity. These plodders are found in all kinds of business. They are struggling simply for bread, and many there be who fail to win it. The man who would make a success of a business venture must leave the rank and file, and get off the tread-mill. He must climb out of the rut. He must be an originator of practical ideas, and an independent thinker. He must be able to clearly see a point, and then possess the executive ability to make it. He must possess sense enough to know that he cannot advance without breaking ranks."

A Broader View. the desert or the forest, who walk in a circle. Some men, as the saying goes, trot around from day to day the one little cabbage leaf and imagine that its circumference is the circumference of the world. They see nothing beyond it but darkness. Other worlds may have an existence, but to them these are as mysterious as the planet Mars. There are business men built on this plan. It is needless to say that they have no use for a trade paper dealing with matters connected with their calling. Nothing is to be learned outside of the knowledge they already possess. They know it all. But somehow, just as with the tree whose roots receive no water, a process of general decay gradually sets in. Or, like the farmer who works the same soil from year to year, constantly cropping it, and never feeding it with needed nutrition, the powers of giving forth finally weaken and are eventually lost. One cannot constantly give out and never take in. The system of reciprocal recuperation and feeding exist all through nature. The man of business, who expects to rise to the heights in the world of commerce, must widen his horizon, broaden his vision, dig deep, look up and beyond, be ready and expectant of learning something new and valuable every day. There is no such thing in the world of business as living like the oyster, closed up in one's shell. There are worlds

beyond.

"A man's business life is too short," Don't says a contemporary, "to waste any portion of his time in fretting over any trifling matters of business. If a man has a mind to be annoyed by every little mishap that occurs in his establishment he can keep himself in constant hot water by worrying. There is neither sense nor reason in flying into a fit of passion because some careless clerk breaks a stone fixture, leaves a faucet running, smashes a jug, or commits some other trifling blunder. Constant fretting on the part of employers makes clerks and book-keepers nervous, and in this condition of mind and body they are far more apt to make mistakes than they otherwise would be. Business worry wears a man out very rapidly, and when the habit of fussing is acquired, it is extremely difficult to rid oneself of it. There are men who work themselves into perfect fits of passion over little insignificant matters not worthy of serious thought and consideration. There are other men who fret because they fear that something unpleasant is going to happen to their business. They may have obligations to meet, a note due at the bank, while their customers cannot be depended upon to help them out of a tight corner, but there is no earthly use of borrowing trouble until trouble comes, and then every enterprising merchant should manfully meet it. There is a great difference in merchants. Some wear themselves out before middle life, become irritable, morose, snappish and disagreeable in the conduct of a very small business, while other men,

with vast interests and great responsibilities who are calm and well poised, patient and nervy, live to a good old age without borrowing trouble or shattering their nerves over trifles."

It has often been remarked that the The Good good a man has done is seldom They Do. known until after all that is useful of him here has been consigned to the earth. The critical, yes the cynically critical spirit is strong in human nature, and more effort is given by many to fault-finding than to meeting out words of encouragement and praise to those who have earned these. We would not like to say that individuals or organizations are doing all the good they ought to do for others. The conviction is strong that we all fall short in these matters. Yet much effort is being exerted for the well-being of others that we are often slow to take cognizance of. Directly in the interests of the thousands of lumbermen whose work shuts them up in the bleak forest for about six out of twelve months in the year disinterested efforts are put forth both by our churches and temperance organizations to a degree that we frequently hear nothing about. Work among the lumbermen is a distinct department of W. C. T. U. effort and large quantities of literature are distributed among the camps every winter. A report from the Presbyterian Synod of Montreal and Ottawa before us at this writing shows that during the season just closed 124 camps, 8 depots and 14 stopping places had been visited and that the gospel had been preached and tracts distributed among 4,154 men in the woods. As many as 1,120 volumes had been distributed among men as well as 22,318 tracts. The lumber regions visited were Mattawa, Madawaska, Gatineau, Bonnechere, Petawawa, DuMoine, Muskoka, and the shanties in the vicinity of Scott's lake. It is proposed that next winter two missionaries be engaged during the season, one as

FIRE APPARATUS FOR A MILL.

heretofore in the Upper Ottawa and Mattawa, and an-

other in the Gatineau district.

TT may be handy to know, says a contemporary that about 65 pounds water pressure at a nozzle will be required to throw a one-inch stream 150 feet horizontally with a single length of hose, 70 pounds pump pressure at the nozzle. Seven to nine pounds must be for each 100 feet of hose, and the diameter of the hose used has considerable to do with the result. To maintain 50 pounds pressure at the nozzle and throw water 125 feet horizontally or 79 feet vertically through 100 feet of hose will require 67 pounds pressure at the pump. For 200 feet of hose \$4 pounds pressure; 300 feet, 101 pounds; 400 feet, 118 pounds; 500 feet, 135 pounds; 600 feet, 152 pounds; 700 feet, 169 pounds; 800 feet, 186 pounds; 900 feet, 203 pounds; 1,000 feet of hose, 220 pounds pressure will be required. By using the above data when setting up a fire pump, the reader will not be in the predicament a mill owner recently found himself. The pump and connections were erected and upon testing the stream through 300 feet of hose, it was found that sufficient power could not be had at the pump to throw the water 20 feet beyond the nozzle.

MONOPOLIES.

T would seem that modern monopolies are not without their historic ancestors. They have simply evolutionized in dimensions and faded in their original modesty. The first concepts were local and limited, every peahaving its rink in a special thimble; the latter edition has no such waistband, but has all the planet on which to live and move and have its spoils. The difference between the sixteenth and nineteenth centuries in their monopolistic histories is simply a matter of degree. The cockatrice is still in the egg. In the days of the Tudors patents to deal exclusively in particular articles were so lavishly bestowed on courtiers and royal sycophants that scarcely a commodity remained free. They extended to salt, leather and coal, and only made a respectable halt by the bread basket of the people. Even Lord Bacon, the legal luminary of the times, handed over to a pair of fortunate barons the exclusive manufacture of gold and silver lace, giving the dainty patentees the right to search houses and also to arrest any person alleged to be an interloper in the trade. Is the modern coach traveling the same road?

STEAM CEMENT.

MANY times little occurrences come up in an engineer's practice where some kind of cement which will stand the heat and pressure of steam can be used to excellent advantage. Perhaps a blow hole in the casting opens up and a stream of steam or water escapes. In such a case it would be most desirable if there was some cement handy which could be put upon the defective spot and would set within a few moments and afterwards remain tight. Many other circumstances often come up where a good cement that would set solid and strong would be found most useful. To be sure, one of the best ways of fixing such things when they occur is to replace the defective by new material, but as this cannot always be done without the expenditure of more time and trouble than is convenient to give it, something that will serve a good purpose instead is desired. A contemporary gives the following recipe for a preparation which, we think, will be found quite useful, as we have often used a cement of similar composition to this . Five pounds Paris white, five pounds red lead, four pounds black oxide of maganese. The whole is to be well mixed and a little asbestos and boiled oil added. This cement will set hard in from two to five hours, and it is not subject to expansion and contraction to such an extent as to cause leakage afterwards. Leaks that occur in places which are difficult to get at and remedy, may often be stopped by the application of a little cement composed of the above materials in about the proportions specified. Tradesman.

"DONT'S" FOR STEAM USERS.

DO not condemn any appliance introduced ostensibly for the purpose of securing economy or safety without giving it a fair trial, as some of the most valuable inventions now in use were ridiculed and rejected when first introduced. Many excellent "devices" have been condenned by those having the care of boilers and engines.

Do not discountenance any device, invention, adjunct, or arrangement that will lessen your labor, induce economy, and at the same time give a guaranty of safety. Give everything placed in your charge by your employer a fair, impartial trial.

Do not allow the boiler front to become filthy or the gauge-cocks to leak and become covered with mud and the salts resulting from impurities in the water, as this would furnish strong evidence of slovenliness.

Do not let anything connected with the boiler in your charge run from bad to worse, with the idea that at some certain time you will have a general overhauling and repairing, because an accident may occur at any moment, involving serious loss of life and property.

Do not neglect to have a boiler insured when practicable, as insurance is generally accompanied by intelligent inspection, which furnishes a guaranty of safety to the engineer, owner, or steam user.

Do not reject the advice or suggestions of intelligent boiler inspectors, as their experience enables them to discriminate in cases which never come under the observation of persons of a different calling or pursuit.

LINKING BELT FOR SLOW MOTION.

S is well-known by all practical men, belting in general use is not well adapted to slow motion uses, or for driving any machine or piece of machinery that has a very slow motion. Nor is it always convenient to drive such with gear wheels, even if it were desirable to do so, which, as a rule, it is not. As a substitute for both no better can be found than chain, or what is commonly called "link belting." It is well adapted to the purpose and as reliable as gear wheels, there being no possible chance to ship or run off the wheels.

EXHAUSTION AND ACCIDENTS.

N investigations made as to the causes of industrial accidents, not a few of these are traceable to exhausted and overworked labor. Men as yet are not east iron automatons, nor is there that metallic fidelity in hones and sinews that we find in locomotives and clocks. There is a limit to the vigilance and endurance of the strongest of men, and imposition in that direction is not only a claim on a humane society but an occasional subpana of the coroner. In many cases of accident the cause is not so much due to carelessness as to help lessness.- Age of Steel.