

MACHINERY & MFG.

THE POWER OF "SCIENCE."

An expert sat at his desk one morn,
And his visage was sad and his looks forlorn,
For no client had darkened his office door
In all that week or the week before.

He sat in his chair with a languid lop,
With his feet perched up on his roller top,
While his hands through his pockets vainly strayed
For the "wherewithal" for a "lemonade."

The ponderous volumes about him showed
That of weighty knowledge he carried a load,
With Mechanics and Statics and deep mathematics
And Thermodynamics he overflowed.



A step is heard on the stair below,
A step that his anxious ear don't know,
With visions of practice his pulses beat
As he puts on his glasses and lowers his feet.

The footsteps ascend. "Quick" a pen and a book,
Or something to give a professional look;
And when his two visitors entered you'd think
No time was allowed him to eat or to drink.

"One moment please, gentlemen, just be at rest
Until I arrange this report of a test."
"Then—" Then briskly, "Now, gentlemen, what can I do
To render myself of assistance to you?"



The clients advanced, angry, heated, and red;
"Here's a tenant of mine, see," the elder one said,
"To whom I am furnishing twelve horse or more,
While he isn't willing to pay for but four."
"Oh, you grasping old rascal! you'll make the man laugh
When he sees I can't use but three horse and a half,
My machinery is light, I have little to do,
And most of the time I am using but two."

"Be calm," said the expert, "We'll settle this case,
With professional dignity stamped on his face,
"With problems like this I have frequently dealt,
Let's see, to begin with, how wide is your belt?"



They looked at each other but neither could tell,
"We never have measured," the expert said, "Well,
Is it two, six, or four—can you tell somewhere near?
But the clients were stuck, they could give no idea."



"Then seizing his pencil he laid off a space
Of a width that he judged would apply to the case,
"About this width?" he asked. With a smile of relief,
They declared it exact to their honest belief."



"The diameter, now, of your pulley," he said;
But neither one seemed to have this in his head,
Until the old expert suggested the size,
By holding his hands to be gauged by their eyes."

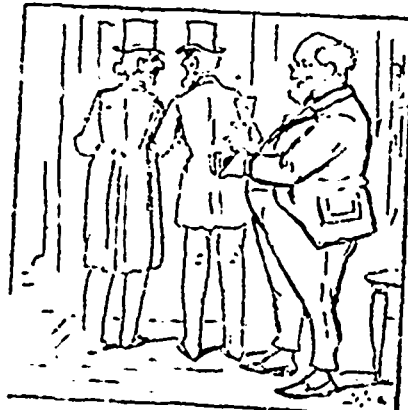


"The speed of your shaft is the next thing to find,"
But neither could happen to call this to mind,
"Is it fifty, two hundred, or is it this speed?"
"There! there! that's just it," and thus point was agreed."



Then came from his table of logarithmic sines,
The value of 22, with which he combines
It, to allow for the belt being tight,
While the clients agree that 'tis wonderful quite."

The expert looked smilingly up from his task,
"How much do you make it?" they eagerly ask,
"Just six and eight hundredths-horse power exact,
And if figures don't lie there's no doubt of the fact"



"That's just what I told you," the landlord exclaimed,
While the tenant averred that is just what he claimed,
And both of the clients expressed their delight,
At the learning and wisdom that settled their plight,
His fee of ten dollars they willingly pay,
And in perfect agreement they bid him good day,
But their steps on the staircase had not reached the floor,
When the legend "Return Soon" appeared on the door"



—Boston Journal of Commerce.

Mr. Sidney Smith will open a machine shop at Fort William.
The Rathbun Company, Deseronto, Ont., has 3,000 men in its employ.

The value of manufactures exported from Canada during the month of April was \$299,326.

A Toronto speculator is trying to get a bonus for the establishment of a foundry at Orangeville, Ont.

Messrs. Putton & Sons, of the Orillia foundry, have the contract to supply the hydrants required for the extension of the town waterworks.

Application has been made for supplementary letters patent to increase the capital stock of the Canada Jute Co., of Montreal, from \$50,000 to \$100,000.

The citizens of Fort William, Ont., are booming their town as a manufacturing center, and with that object are sending out circulars setting forth its advantages.

Extensive deposits of moulding sand, for foundry purposes, were discovered recently at Copetown, Ont., near Hamilton, and large quantities are being shipped to the States.

An exchange says that when wood is to be the fuel employed under a boiler, the grate area should be from 25 to 45 per centum larger than if coal were to be the fuel used.

Messrs. R. H. Smith & Co., saw manufacturers, St. Catharines, have resolved themselves into a joint stock company, limited, with a capital stock of \$75,000.

The Weldell Bridge and Machine Works, Trenton, Ont., are reported to have turned out over \$40,000 worth of work during the last three months, giving employment to about 40 men inside the shop.

Mr. W. H. Howell proposes to start a manufactory at Ottawa for the manufacture of paper from sawdust and saw mill refuse. Mr. Howell claims to have perfected the process for attaining this object.

An attempt was made recently to set fire to McInnes & Co.'s storehouse adjoining their oatmeal mill, at Ingersoll, Ont., but fortunately was discovered and extinguished before much damage had been done.

The roller machinery recently placed in the mills of Mr. Peter Campbell, Lachute, Que., for manufacturing rolled oats, was manufactured by Messrs. McQuat & McRae, of the Victoria Foundry, Lachute.

A Vienna engineer has just taken out a patent for a new smoke-abating process. By means of electricity he proposes to condense the solid part of the smoke as it arises from the coal, the carbon thus formed falling back into the furnace.

Messrs. Robt. Wood & Co., Oshawa, Ont., have purchased all the patterns and other apparatus of the estate of the Joseph Hall Works, together with a portion of the building, and intend to supply repairs for all machinery made by that company.

An electro-magnet with a carrying capacity of 300 pounds is attached to a crane in the Cleveland steel works, which readily picks up billets and other masses of iron without the aid of any device. A boy is thus enabled to do the work of a dozen men.

The estimated cost of the G. J. R. locomotive and boiler shops at Stratford, Ont., is \$110,000, towards which the city gave \$60,000 as a bonus. The car shops will cost \$150,000, and a bonus of \$60,000 has been provisionally voted by the city toward their erection.

So much water is drawn from the canal by the Cornwall mills that there is frequently not enough left to float vessels passing through the canal. The Montreal Board of Trade has asked the Government to interfere on behalf of the vessel owners and shippers.

The smallest electric plant in the world is what is claimed for the one at the Morton House, New York. It consists of a Corliss engine, Edison dynamo, shafting, pulleys, incandescent lights, etc. It is inclosed in a glass case three feet long, 1 1/2 feet wide and 2 feet high.

A singular case is to occupy the attention of the people of Woodstock. About two years ago the town gave the Patterson Company a bonus of \$35,000, exemption from taxation and water rates, to induce them to remove their manufactory to Woodstock. The company put in operation a condensing engine which used so much water that the pressure on the water mains was reduced thereby to an extent which rendered the service inefficient in case of fire. The town authorities hold that the use of the condenser