

NEED OF CHEAP MACHINERY.

Causes Which Tend to Raise the Cost of Machine Making.

A great and damaging defect was noted at the Paris exposition among the triumphs of mechanical ingenuity and that is without exception that machines of all kinds are too dear, says the London Spectator. In France the masters prefer to sell a few machines dear rather than many at a lower price. Trade union rules in England which restrict the number of hours of work or limit the output show something of the same spirit. Add to this the objection of the master generally to turning out anything but the best work—which is highly creditable, and we find the nucleus of a considerable body of opposition to one of the great and pressing needs of the day.

The difficulty is evidently beyond the financial capacity of modern mechanical manufacturers. The result has been that while material of most kinds remains cheap and becomes cheaper, the machinery to convert it remains dear and lessens the benefit of the cheap raw material. High wages are the cause most often urged for the prohibitive price of mechanical appliances. But this cannot be maintained as the reason. The Oldham cotton spinners are among the most flourishing workmen in England, but the article they manufacture is so inexpensive that the poorest and most frugal nations on earth buy it. Recently the natives of parts of central Africa, where cotton is indigenous, ceased to grow it or to make the cloth. It was cheaper to buy what was made by the highly paid operators of Lancashire. Clearly high wages do not necessarily mean that the article produced

MUST BE DEAR.

The reason for the dearness of machinery clearly lies elsewhere. It is not because there is no demand for it. Mowing machines and sowing machines, mainly for domestic use, might be quoted as instances—though we are far from regarding either as coming up to the standard of really cheap machinery.

There is, in fact, only one machine which is made really cheap, and good—the watch. But the watch is a highly valuable and instructive instance, so by all means let us make the most of it. All the arguments by which manufacturers say you cannot, will not and shall not have a cheap, self-binding reaper, or a cheap steam digger, or a fifty-guinea autocar, or engines for a launch, that shall not cost more than if they were cast in silver, were used against the men who said they could make watches. Fifty years ago a keyless stop-watch, in which the parts of seconds could be measured, and the hands stopped quickly enough to time the flight of a bird, would have cost not less than £30. To-day one can be bought for £1. It is true that the case is gun-metal. But the machine is good enough for use. And it costs one-thirtieth of what it did fifty years ago. That is the kind of thing we mean when we speak of cheap machinery.

A case in which the same treatment might yield enormous results to-day is that of the self-binding reaper. The first reaping machine cost £70. The most modern self-binder now costs about £35. That is a reduction of one-half since the invention appeared. Practically every one who farms would buy a reaper, often many reapers, if they were cheap. But the price, considering all things, is simply extravagant. The raw material for them, as for most machinery, is

VERY INEXPENSIVE.

It is wood, iron and steel. In the ingot and the plank probably the whole could be bought for a couple of sovereigns. With fifteen times the cost of the material added, can we call this a cheap machine? If it were, it would cost about £8 or £10. Yet that would be only a reduction to about one-quarter of the present price. The "working" watch has been reduced to one-thirtieth. But supposing a reduction all round to one-quarter of the present price, let us say, for farming machinery, or for locomotives on roads, effected solely by brains and organization, as was the reduction in the price of the watch. What a decrease in the labor bills and profit to the farmer would result! It might mean the re-establishment of English agriculture and an era of prosperity like that introduced by steam and coal sixty years ago.

A contributing cause of the expense of making machinery is the costliness of "the machines which make machines." These are known as "tools," and the makers are "tool-makers." From £200 to £1,000 is the range of prices for "tools" on the list of a

All Japan teas are colored.

SALADA

CEYLON GREEN TEA is pure and uncolored.

prominent firm. The work turned out is perfect. But there is a great tendency to extravagance of finish in non-essentials in the results.

What is wanted is a tool which can cut steel like wood, and do it cheaply. It is said that at Paris one which fulfilled the first condition was exhibited. It is noted in nearly all machine-making that there is a luxury of finish, a downright wastefulness of strength, polish and even of what the makers consider ornamental, which is not practical. Almost the earliest machine in which educated Englishmen took any interest was the sporting gun. It was long before any respectable gun-maker would condescend to do what the Belgians of Liege, and later the manufacturers of Birmingham, contrived to do, to turn out a quite serviceable gun for £6 instead of £40. When a future Gladstone arises to revise our system of rating, to readjust burdens, and, where possible to remove mischievous taxes, he may be trusted to give early attention to the impost, recent in date, but antiquated in spirit, which taxes the machinery which makes machines.

VOCIFEROUS "BETSY."

How the International Gun Saved the Day at Pekin.

This interesting account of the now famous international gun at Pekin, known as "Our Betsy," is published in the London Standard:—

"An American gunner, named Mitchell, of the United States Legation Guard of Marines, proposed to make a small cannon out of an old British Legation pump. A number of Chinese converts, refugees in the British Legation, together with a few marines, were sent to shops within the 'lines' to find materials and tools wherewith to bring about the necessary conversion of the pump. While they were foraging in a deserted blacksmith's shop, they discovered, to their intense joy and surprise, an old cannon of Chinese manufacture, and brought it home, amidst the shouts of the besieged.

"The next trouble was suitable ammunition. When the Russians left their legation in more or less of a panic, they threw some shells they had in their possession into a well to prevent their possibly falling into the hands of the Chinese. These were fished out and adapted, after a lot of skill and ingenuity, to meet the contingency. Other ammunition was made out of pewter candlesticks and temple vessels of every description, looted from a temple within the 'lines.' The manufacture of this ammunition was under the superintendence of one of the British marines.

"'Betsy' was mounted on an Italian gun carriage; Chinese gunpowder formed the charge; Russian shells were fired, and the American gunner, Mitchell, fired the gun. Unfortunately, on the day before the troops arrived, this very capable gunner was seriously wounded in the arm by a bullet from the enemy's fire.

"Although it was not by any means a formidable weapon, the excessively loud report therefrom usually struck consternation into the hearts of the Chinese soldiers, with the inevitable result that they quitted their position as quickly as possible when 'Betsy' was brought to bear upon them. 'Possibly they imagined that by some means or other the Legation defenders had been reinforced by a big battery of artillery, seeing that 'Betsy' was constantly being moved from one position to another and during the first days of the siege there was an entire absence of anything of the nature of heavy firing from the Europeans.

"One night, when the French Legation, the eastern limit of the lines of defence, was hard pressed, 'Betsy' was taken over and put into operation there, with the result that the attacking Chinese soon scattered in all directions.

"On the memorable night before the relief force arrived when the Chinese made their most vigorous attack of all, the defenders had in operation every single gun that could be mustered—'Betsy' the British Nordenfolt quick-firing gun, brought up by the Marine Guard, the American Colt quick-firer, the Italian one-pounder, and the Austrian machine-gun.

"'Betsy' was so named after Lady

MacDonald. This interesting gun will probably find a home in the British Legation, although the Americans lay claim to it on the score of its being found by Mitchell and fired by him."

THE MODERN WOMAN.

A Gorgeous Description of Her Self-Possession and Her Grace.

An observant writer has this to say with reference to the modern woman:

"How young the well-dressed woman of 45 or 50 look, how free from care and responsibility. There is no single detached word in our language large enough to express the complex impression made by these straying matrons of high fashion. The immediate sense of wealth, of habitual self-indulgence, of custom to command; the unmistakable expectation of being unobscuredly waited upon, which brings a head waiter as surely as a familiar whistle calls a dog—all this is intensely amusing, and to the woman devoid of footman and lady's maid makes an interesting study. Environment has certainly made grand dames of these ladies, without doubt or controversy.

"And the maidens, typical, high-class young women of the last century, what a strange development they are from the circumstances, the traditions and the opinions of their grandmothers! Straight, athletic and undisturbed by crowds, or pushing, half-discourteous men, how loudly they laugh, how distinctly and freely they talk, of the season, of dress, of the coming wedding, or the last broken engagement. How brown they are, especially their hands, brilliant with dazzling rings, and how rough and unkempt their hair! What curious, fanciful clothes they wear, and what wonderful combs and neckties. And if she chances to lunch next a trio of these very independent young girls no elderly woman will fail to be surprised at what they eat, while they laugh and chaff each other like schoolboys and restlessly put up their hands to press uncertain combs into their loose rolls of fluffy hair. They are fine specimens of physical health, with firm shoulders and quite astonishing, muscular arms, but they are not fascinating, nor does the new alert, commanding manner charm."

Lumbago

is Rheumatism of the back. The cause is Uric Acid in the blood. If the kidneys did their work there would be no Uric Acid and no Lumbago. Make the kidneys do their work. The sure, positive and only cure for Lumbago is

Dodd's Kidney Pills

HE TOLD HER.

"A marriage took place at a little country church, the couple being elderly people. The man was very deaf, so deaf that he could not hear unless someone shouted in his ear. So when the clergyman read the words: 'Wilt thou have this woman to be thy wedded wife?' etc, the old man did not understand a word the clergyman said, but turned to his intended and asked: 'What do he say? referring to the parson. Whereupon the woman shouted into his ear: 'He wants to know if you'll have me for your wedded wife. The old man looked lovingly at his intended and exclaimed: 'Why, sartingly, Mary dear; now, didn't I tell ye so the other night?'

This is a "free country," still a law that compelled people to try Blue Ribbon Ceylon Tea would do a lot of good.

Policies May Change. Opinions May Change. but one thing that never changes, that is the quality of

LUDELLA

CEYLON TEA, it always remains the best. In Lead Packets 25, 30, 40, 50 and 60c.

APPLES.

Poultry, Butter, Eggs and other Produce. If you have any correspond with us. We want 100 CARLOADS to supply our trade.

The Dawson Commission Co., Limited, Toronto.

WHAT HE WAS THINKING ABOUT.

Soon after Singleton's first baby was born Mrs. Singleton first baby upstairs one evening and entered the room where her darling lay asleep. There she found her husband standing by the side of the crib and gazing earnestly at the child. As she stood still for a moment, touched by the sight, the tears filled her eyes, and she thought: 'Oh, how dearly Charles loves that boy! Her arms stole softly around his neck, as she rubbed her cheek caressingly against his shoulder. Singleton started slightly at the touch. Darling, he said, dreamily, voicing his thoughts, it is incomprehensible to me how they can get up such a crib as that for half a guinea.

VERY APPROPRIATE.

"My dear," said Meeker to his better half, on observing new striped hose on his youthful son and heir, "why have you made barber poles of Johnnie's legs?" "Well, why not?" retorted Mrs. G. "Isn't he a little shaver?"

OBLIGING.

Artist—Will you permit me to paint that coat of yours?
The Other—You can par 'er if ye like—she don't want no paint.

MONTEAL HOTEL DIRECTORY.

The "Balmoral," Free Bus Am. Plan. \$1.50 & up.
AVENUE HOUSE—Motel—College Avenue Family Hotel rates \$1.50 per day.

FATHER—DO YOU THINK I OUGHT TO HAVE MY DAUGHTER'S VOICE CULTIVATED?

Absent-minded Visitor—I should think you ought to have something done for it.

W P C 1052

CALVERT'S CARBOLIC OINTMENT.

For all skin ailments.

J. C. Calvert & Co., Manchester, England

Metallic Ceilings

Woods, etc. 124 Adelaide St. Toronto, Ont.

LAW

Removal to Wesley Buildings, Richard St. W., Toronto.

Music Teachers Wanted

Whaley, Royce & Co. 158 Yonge St. Toronto, Ont.

Catholic Prayer

Books, Rosaries, Graces, etc. D. & J. SABLIER & CO., Montreal.

FEATHER DYEING

British American Dyeing Co.

ROOFING and Sheet Metal Works.

D. B. DUTHIE & SONS, Adelaide & Widmerstr., Toronto

From Small Beginnings

Some of our Best Deposit Accounts were begun in a modest way. By adding small sums at regular intervals, and by the accumulation of interest, they have grown till they now show handsome balances.

It is not necessary to wait till you have a considerable amount to make a commencement. We accept small sums on deposit and allow interest at 3 per cent. per annum, payable half-yearly.

The Canada Permanent AND WESTERN CANADA MORTGAGE CORPORATION.

Toronto Street, Toronto.

"ONE POUND CAKES"

FOR HOUSEHOLD USE Laundry, Washing Clothes, Ironing, Sewing Processes. PARAFFIN

WAX

THE QUEEN CITY OIL CO., Limited. Sam'l Rogers, Pres., Toronto. Ask your dealer for it.

THE MOST NUTRITIOUS. EPPS'S GRAPEFUL-FOAMING COCOA BREAKFAST-SUPPER.

Artist—Will you permit me to paint that coat of yours?
The Other—You can par 'er if ye like—she don't want no paint.

Artist—Will you permit me to paint that coat of yours?
The Other—You can par 'er if ye like—she don't want no paint.

Artist—Will you permit me to paint that coat of yours?
The Other—You can par 'er if ye like—she don't want no paint.

Artist—Will you permit me to paint that coat of yours?
The Other—You can par 'er if ye like—she don't want no paint.

Artist—Will you permit me to paint that coat of yours?
The Other—You can par 'er if ye like—she don't want no paint.

Artist—Will you permit me to paint that coat of yours?
The Other—You can par 'er if ye like—she don't want no paint.

Artist—Will you permit me to paint that coat of yours?
The Other—You can par 'er if ye like—she don't want no paint.

Artist—Will you permit me to paint that coat of yours?
The Other—You can par 'er if ye like—she don't want no paint.

Artist—Will you permit me to paint that coat of yours?
The Other—You can par 'er if ye like—she don't want no paint.

Artist—Will you permit me to paint that coat of yours?
The Other—You can par 'er if ye like—she don't want no paint.

Artist—Will you permit me to paint that coat of yours?
The Other—You can par 'er if ye like—she don't want no paint.

Artist—Will you permit me to paint that coat of yours?
The Other—You can par 'er if ye like—she don't want no paint.

Artist—Will you permit me to paint that coat of yours?
The Other—You can par 'er if ye like—she don't want no paint.

Artist—Will you permit me to paint that coat of yours?
The Other—You can par 'er if ye like—she don't want no paint.

Artist—Will you permit me to paint that coat of yours?
The Other—You can par 'er if ye like—she don't want no paint.

Artist—Will you permit me to paint that coat of yours?
The Other—You can par 'er if ye like—she don't want no paint.

Artist—Will you permit me to paint that coat of yours?
The Other—You can par 'er if ye like—she don't want no paint.

Artist—Will you permit me to paint that coat of yours?
The Other—You can par 'er if ye like—she don't want no paint.

Artist—Will you permit me to paint that coat of yours?
The Other—You can par 'er if ye like—she don't want no paint.

Artist—Will you permit me to paint that coat of yours?
The Other—You can par 'er if ye like—she don't want no paint.

Artist—Will you permit me to paint that coat of yours?
The Other—You can par 'er if ye like—she don't want no paint.

Artist—Will you permit me to paint that coat of yours?
The Other—You can par 'er if ye like—she don't want no paint.

Artist—Will you permit me to paint that coat of yours?
The Other—You can par 'er if ye like—she don't want no paint.

Artist—Will you permit me to paint that coat of yours?
The Other—You can par 'er if ye like—she don't want no paint.

Artist—Will you permit me to paint that coat of yours?
The Other—You can par 'er if ye like—she don't want no paint.