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THE TRADER.

TORONTO, ONTARIO, SEPT., 1883.

Sent free to every Jeweler and Hardware Merchant in the Dominion of Canada

Advertising Rates.

Full Page, . . . \$20 00 each issue  
 Half Page, . . . 12 00 "  
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Small Advertisements, 8 cents per line.

A discount of 25 per cent. will be allowed from the above rates for yearly contracts. All advertisements payable monthly

Business and other communications should be addressed to

THE TRADER PUBLISHING CO.,  
 13 Adelaide Street East, Toronto.

SPECIAL NOTICE.

To ensure insertion, changes or new advertisements must be sent to the office not later than the 20th of each month.

Editorial.

CANADA'S GREAT FAIR.

The fifth annual exhibition of the Toronto Industrial Exhibition Association, which will be held in this city from the 11th to the 22nd September, promises to eclipse all of its predecessors in size and interest. The manager and directorate have spared no pains to make it a grand success, and we look forward to the fortnight of its continuance as a red letter period in this year's history of Toronto. It is expected that the Marquis of Lorne and H. R. H. the Princess Louise will formally open the exhibition, an event doubly interesting, as it will commemorate their last visit to Toronto. The "Queen City" will be *en fete*, and should the weather prove favorable we shall expect to have an influx of nearly half a million of visitors to see Canada's greatest Fair. Railways, both in the United States and Canada, have arranged special excursions, and the probability is that this year our show will make itself more cosmopolitan than ever before. Canada, as well as Toronto, should feel justly proud of our Industrial Exhibition, for by comparison it is far ahead of anything of a similar kind in Great Britain or Europe, and fully abreast of the best State Exhibitions that our neighbors to the south of us can boast. As representing not only the enterprise of the citizens of Toronto,

but the genius and progress of the people of Canada generally, it is well worthy of a visit and of the support of our people at large. The people of Toronto are willing that it should be judged upon its merits alone, and only ask a fair field and no favour.

The grounds and buildings will be open to the public on Tuesday, the 11th September, at 9 o'clock, a.m., and will continue open each day from 9 a.m. till 10 o'clock, p.m., both grounds and buildings being lighted by electricity each evening. We understand that all the railways running into the city have agreed upon a uniform rate, the first week at one and one third fare, and the last week at a single fare for the double journey.

The low fares and special attractions should make this a favourable time for buyers to visit this market and make a personal selection from the large and well assorted stocks that our wholesale dealers have been importing to meet the demand of this fall's trade.

THE OUTLOOK.

The harvest for the year has now been pretty well gathered in, and merchants both wholesale and retail are taking the precaution to forecast the probable state of business before proceeding to make their final arrangements for this fall's trade. It is well that it should be so, for as a rule the successful merchant is the one who looks carefully ahead and lays his plans for the future, as the necessities of the times seem to demand. The merchant who goes tearing along under a full head of steam, and takes no heed of breakers ahead in the shape of bad harvests and such like commercial drawbacks, although he may succeed for a time, is almost sure to come to grief in the long run. For these reasons we say our merchants are wise to forecast the future carefully before proceeding to make investments which may either make them or break them before they are finally disposed of.

As everyone of our readers know, the early part of the past season was extremely dispiriting from a commercial standpoint. Talk as we may, the farmers are the backbone of this country, and it depends almost entirely upon the success of our annual harvest whether our country is going to be blessed with good times or suffer from depression. The

outlook during the early part of the season was black, for it seemed almost certain that the wet, cold, stormy weather was bound to make this year's harvest a failure, and there was as usual, not wanting those who prophesied ruin and disaster to Canada as a natural consequence. We are glad to know, however, that these anticipations of evil were ill founded, and that the favorable harvest weather has made such an improvement in the prospects as to warrant the conclusions that we are going to have a fair if not a good year after all. Although fall wheat is below the average, spring wheat and other coarse grains are good, while root crops are better than usual. In the Province of Manitoba, wheat is more than an average crop, and the Prairie Province alone, after supplying her home demand, will, it is estimated, have fully 3,500,000 for export. In the Province of Ontario the general crop is somewhat behind that of last year—how much will be seen by the annexed table, compiled by Mr. A. Blue, of the Ontario Bureau of Industry.

	1883.		1882.	
	Acres.	Bush.	Acres.	Bush.
Fall Wheat.....	1089455	10222359	1188220	31257292
Spring Wheat.....	537000	10237080	580317	9663009
Barley.....	170224	20018495	888017	1224107
Oats.....	1123229	55721044	1376115	5007097
Hay.....	484158	3577774	128034	3508868
Peas.....	543713	11718339	557157	10943335
Totals.....	4537817	118939091	4744357	127966833

From this it will be seen that the main falling off in this year's crop is in fall wheat, but this local failure in Ontario will be more than made up by the great crop in Manitoba, and as a matter of fact we may safely consider the wheat crop of Canada as fully equal to that of any former year. As a matter of fact, however, it is gratifying to know that Ontario and the older provinces are in a large measure getting independent of the wheat crop which was formerly our sole mainstay. Every year we are having less attention devoted to wheat and more to the raising of cattle and dairy products, and these we are glad to see from the same report are more than usually favorable:

"A return of the dairy butter produce of last year shows that the quantity made was 98,442,123 lbs.; but a large number of farmers were unable to fill the schedule under this head, and it is probable that the quantity given does not represent more than seventy per cent. of the actual production, possibly not so much. There are in the province this year 29 creameries, or 18 more than last year. The produce of 17 of these from the opening of the season to July 31st was 250,308 lbs., of

which 217,855 lbs. sold for \$48,140. The number of cheese factories is 628, which is 151 more than the number reported to the Bureau of Industries last year. The produce of 262 factories that have made returns for the same period as the creameries was 10,898,507 lbs., and of this quantity 8,481,872 lbs. was sold, realizing the sum of \$908,810. The quantity of cheese on hand at the 262 factories on Aug. 1st was 2,402,185 lbs."

From these figures and the reports which reach us from every quarter we may safely conclude that not only is our harvest much better than had been anticipated, but that taking it altogether it is fully up to the general average. This fact has inspired a feeling of confidence in the country, which was almost lacking a couple of months ago, and we look forward in a general way to a continuance of prosperous times for this country. We think the country is safe, and although care should be exercised in buying, over caution in this respect will be almost as great a mistake as buying rashly. We think the right thing will be to strike the mean between them, and buy boldly and yet carefully.

#### CHEAP PARCEL POST.

The new parcel post system, of England, is a long stride in the proper direction, and is so far ahead of anything of the kind in the world, that even the extra clever people on this side of the Atlantic would do well to copy it. People in America credit the British people with being slow and behind the spirit of the age, and perhaps they are in some things, but in others it is but fair to confess that they are a long way in the rear.

The English postal and telegraph systems have long been the best things of their kind in the world, things for other nations to wonder at and copy, but their latest development of British postal enterprise puts a fitting crown upon a structure that is now as nearly perfect as human ingenuity can make it.

While not possessing any huge monopoly like our express system which sucks the best blood out of every commercial interest it touches, England has heretofore been equally as well served in this particular, and at much less cost, by means of the various railroad parcel deliveries.

Now, however, thanks to the Government, this new parcel post system will

put the internal commerce of the country in the shape of small parcels, upon a much cheaper and more convenient footing than it ever enjoyed before. By the new system the postal authorities virtually become express carriers, and carry parcels at a paying rate to themselves, which is about one half of that charged by our express companies in this country.

The Act came into force on the 1st of August last, and the effect already has been almost to revolutionize the old system of carrying goods. As a matter of fact the railways, seeing that very much of their best paying business was likely to slip through their fingers, all at once became liberal to a degree before unheard of with them, and have not only reduced their rates, but have established "Fast Train Parcel" systems of their own, in order to hold a share of the trade. Of how the new system is going to effect the carriage of small parcels in England, our readers may judge from an extract below, taken from the *Ironmonger*. In its last issue it says.

"There is at the present time much activity displayed in the large mercantile establishments, warehouses, wholesale and retail shops, and general manufacturers' places of business in the metropolis, in preparing boxes, baskets, and cases for the transmission of goods by the parcels post. A prevailing pattern is that of a light wicker basket, of the maximum dimensions allowed under the Inland Parcels Post regulations, viz., measuring 3 feet 6 inches in its longest dimension, and being 2 feet 6 inches in girth, that is, around its thickest part. Many wholesale houses have, however, adopted a basket for the conveyance of goods by the post of a uniform length and girth, 3 feet each way; while adapting the basket to graduated quantities, sizes of 2 feet and 2 feet 6 inches each way are being rapidly prepared for the new postal department."

More than a year ago we advocated in the columns of *THE TRADER*, the advisability, to say nothing of the necessity, of our own Government looking into this very subject and taking prompt action thereon. The present express system of Canada is an enormous monopoly, and the sooner it is legislated upon and reduced down to a fair living profit, or an opposition started by Government somewhat after the pattern furnished by the new English Parcel Post, the better for the country.

Of course the express companies will squeal, but so does any monopoly when it finds that its power to tax the public as it pleases is gone, and it has to come down to hard pan and compete for busi-

ness the same as other and less favored people do.

A parcel post system, such as England now enjoys, would be a boon to the business men of Canada, and we trust that the Government will see its way before long to make a forward step in this direction.

A two cent postage rate, and the English parcel post system, would, we think, be about two as popular things as the Government could touch, for they would benefit every citizen of Canada without distinction.

#### Selected Matter.

##### THE FIRST HOUR GLASS.

A century after the final overthrow of the Roman Empire, the habit of reckoning by hours and minutes had completely disappeared, from Western Europe. One by one every vestige of art and science disappearing, and, had it not been for the kingdoms of the east, which kept the flame of science just flickering while the west was in darkness, our present system of horology would have fallen in complete abeyance. It was the famous Caliph of Bagdad, Haroun-al-Raschid, who restored the old water clock to Europe. In the year 807 he sent a magnificent clepsydra as a token of friendship to Charlemagne; but it seems that present was looked upon as a thing to be rather admired than copied, for we find no mention of any water clocks of French make until the reign of Philip, contemporary of William the Conquerer. Perhaps the reason of this is that the sand glass (sablier) had been invented in France shortly before the accession of Charlemagne, and that this last contrivance was judged more handy and simple than the other. The first sablier was made by the same man who re-invented the blowing of glass, after the secret had been lost for some centuries. He was a monk of Chartres, named Luitfrand, and the sand glass he made was the exact prototype of all those that have been manufactured since. It consisted of two receptacles of pear-like shape, joined by their slender ends. When the sand had all run out from one into the other, the lower glass was turned uppermost, and kept in that position till empty. Shortly after he had received the gift of Haroun-al-Raschid, Charlemagne caused a monster sablier to

be made, with the horal divisions marked on the outside by thin lines of red paint. This was the first hour glass. It required to be turned over only once in twenty-four hours, and, if it was blown with anything like the care which modern hour glasses are, it must have kept time with as much precision as the best of lever clocks. Indeed, it is not rare to hear people declare, even nowadays, that the hour glass is the best timepiece that was ever invented.—*Jewelers' Circular.*

### SIBERIAN GEMS.

Amethysts of great brilliancy, and beryl, are occasionally discovered in several parts of the Oural—some exceedingly fine crystals of a blue, yellow, and rose color; those of the latter kind are rare, and when perfectly transparent, of considerable value. Chrysoberyl is met with in the same locality as the emerald; occasionally very fine crystals are obtained, and cut into beautiful gems. Topaz is also found in one or two localities, sometimes six inches long, perfectly transparent, and sold at a very great price. Pink topaz is rare. Mr. Atkinson says:—"Up to this time, only five small crystals have been met with at one of the gold mines in South Oural, and one of those was presented to me; I deeply regret to say that it is either mislaid or has been lost on my journey."

English mechanics have been employed in the Oural from a very early period, in its mining operations. Several of them, Mr. A. tells us, have become celebrated for their eccentricity, and their names will be handed down through many generations in connection with the works. He relates a tragical history of the fate of one of these adventurous spirits. In the reign of Emperor Paul, a young mechanic, named Major, was engaged by the Russian Government, and sent to Ekaterineburg to superintend a small mechanical establishment. In this town Major spent a long life, and constructed many machines, which, rude as they were, proved of essential value in the mining districts. Peasants were sent to him from the different villages, who had never in their lives seen any mechanical tools except an axe and a saw. When he entered upon his

duties he scarcely knew a word of the Russian language, which of course added much to his difficulties. However, as years rolled on, he acquired some knowledge of it. German he also learned by coming in contact with the miners, many of whom were from the Hartz Mountains. He likewise contrived to add a little French to his stock. His pay being liberal, and living cheap, he was enabled to keep a good establishment; and, being kind to the workmen, he gained their esteem and that of the officers who served under him, while his eccentricity amused them all. He had at length established a sort of jargon of his own, most strange and peculiar. In giving his instructions, he would begin in Russ, add a few words of German, then a scrap of French, and finally glide into an English sentence, which he concluded with an impetuous volley of threats in case of disobedience.

When the Emperor Alexander visited the Oural he was greatly pleased with the works Major had established, and, as a token of his satisfaction, presented him with a piece of land containing about twenty English acres, with all the minerals it contained, and gold was known to be deposited there. This imperial act of bounty proved fatal to the unhappy Englishmen, who built for himself a house on his land, and a few years later he began to excavate and wash the gold sand, usually obtaining more than two poods of gold a year, at a very small cost of labor. This was worth about three thousand five hundred pounds sterling. He had gone on this way several years, living at his country house with very few people about him, and often having no domestic except an old woman. At length an unusual productive vein occurred; the quantity of precious metal he had obtained during the summer was accurately known to the workmen, each day's produce being weighed, entered in a book, and delivered to Major every evening. He deposited it in an iron box which stood in his cabinet, the key of which he carried in his pocket. This year there were more than three poods of gold in the box. The time was approaching when this treasure would be sent to the smelting works at Ekaterineburg, there to be cast into bars, and forwarded to the mint at St. Petersburg, when, one Sunday morning, Major and his old housekeeper being alone in the house, a noise was suddenly heard

near the entrance door. The old dame rose to see what was the matter; but scarcely had she left the room when she was seized and thrown down a staircase. Major, hearing the noise, rushed to the door of his cabinet with a candle in his hand, when a blow from an axe fell upon his head, and he never breathed again.

After this, the murderers possessed themselves of the box and the gold, with which they made off, closing the doors after them. It was not till the morning of the third day that this terrible tragedy was known, when one of the officers of the machine works came to consult Major on business of importance. Search being made, the ghastly remains of the murdered man were found, his hand still grasping the candlestick. The old woman was discovered in a state of unconsciousness, though still living.

A strict investigation was made, and suspicion fell upon some of the workmen, who were seized and examined, but it was clearly proved that they were innocent. A strict watch was kept on the movements of certain men who were rather suspicious characters. One of these, a small merchant, was taken and searched. On examination, however, he proved to the satisfaction of the police that he was ninety versts distant on the morning of the murder. He was accordingly set at liberty. Years passed over, and all hopes of penetrating the mystery were given up. It happened, however, that the quantity of gold stolen from the mines had become so enormous that the government determined to discover how it was effected. An officer of police was dispatched to the neighborhood, and after a long and skillful course of manœuvring he contrived to effect the purpose for which he was sent. In the course of his investigations, also, he came upon a clue which led to the discovery of the murderer of poor Major, who was no other than the merchant who had been in the first instance tried and acquitted. This man had long been engaged in gold smuggling, in association with those who stole it from the mines. The murder was clearly proved against him and some accomplices, and they were sentenced to the horrible punishment of "running the gauntlet," and died immediately after. The band of gold stealers was broken up, and the officer of police returned to St. Petersburg to receive a reward for his arduous and really dangerous labors. *Exchange.*

### TEST FOR GOLD.

There is a simple method for the detection of gold in quartz, pyrite, etc., which is not generally described in the mineralogical text books. It is an adaptation of the well known amalgamation process, and serves to detect very minute traces of gold.

Place the finely powdered and roasted mineral in a test tube, add water and a single drop of mercury; close the test tube with the thumb, and shake thoroughly and for some time. Decant the water, add more and decant repeatedly, thus washing the drop of mercury until it is perfectly clean. The drop of mercury contains any gold that may have been present. It is therefore placed in a small porcelain capsule, and heated until the mercury is volatilized, and the residue of gold is left in the bottom of the capsule.

The residue may be tested either by dissolving in aqua regia and obtaining the purple of Cassius with protochloride of tin, or by taking up with a fragment of moist filter paper, and then fusing to a globule on charcoal in the blowpipe flame.

It is being shown that gold is much more universally distributed than was formerly supposed. It has recently been found in Fulton and Saratoga counties, New York, where it occurs in pyrites. It has also been discovered in the gravel of Chester Creek, at Lenni, Delaware county, Pa. In one of the Virginia gold mines wonderful richness is reported, \$160,000 worth of pure gold having been taken from a space of three square feet.—*Jewelers' Circular.*

### THE SAND BLAST.

Many are the wonderful and useful inventions of the present day, and not the least of them is the common sand blast. Let us suppose that a piece of marble is to be lettered. Cover the stone with a sheet of wax no thicker than a wafer, cut out the letters, figures, or other ornament, leaving the marble exposed. Next pass it under the blast. The wax will remain uninjured, but the sand will have cut the letters, etc., deep into the stone.

If you desire to have raised letters, cut away the surroundings of the letters down to the stone, and by applying the blast, the sand will cut these surroundings away, leaving the wax-protected letters unscathed.

Take a piece of French plate glass, of

convenient size, and cover it with fine lace, and expose it to the action of the blast sand. Not a fiber of the lace will be injured, but the glass will be worn away wherever it was unprotected by the lace, and its beautiful and intricate pattern will be found engraven upon it, upon the removal of the lace. Beautiful figures and devices of all kinds may thus be engraven upon glass at a comparatively small expense. Even while the sand is wearing away the hardest material, the workman may hold his hands into it with impunity; his hand, yes, but not his nails, else he would have none in a very short time. Even the protection of steel thimbles will do no good, they will be worn away very quickly, but a wrapping of soft cotton will protect them completely. The sand wears away any hard substances; steel, iron, even diamond, but leaves unharmed soft substances, the human hand, wax, cotton, or any other soft article.—*Jewelers' Circular.*

### MUSIC BOXES.

"There is a great demand for music boxes from China," said a Broadway dealer. "The Chinese are passionately fond of them, and at a festival a Chinaman who can afford it carries a music box in each pocket. "What music do they like best?"

"All Chinese music. They will have no other. The sweetest strains from 'Trovatore,' 'Mignon,' and 'Faust' are as 'sweet bells jangled out of tune' to a Chinaman. We have to employ men who can reduce the Chinese music to written notes, and from this as 'copy' the music box is made. We have to make up a different set of tunes for every country. If we should send boxes to France that played 'Nellie Gray,' 'Way Down on the Swanee River,' 'When you and I were Young Maggie,' or 'Sweet By and By,' we should get them back quick enough.

"National airs are the first tunes chosen, then the popular tunes, and then selections from famous operas. Scotch tunes, except 'Auld Lang Syne' and 'Bonnie Doon,' are difficult to render effectively by a music box, and they are rarely used. The great expense in the manufacture of music boxes arises from the necessity of changing the tunes, discarding those that are tiresome and sub-

stituting the latest and most popular. But sit down while we talk."

The writer took a seat, and the strains of "Farandole" from "Olivette" floated from beneath the chair.

"Have a cigar?" He turned a cigar stand, and there came out of it the air of the drinking song Girofle-Girofla."

"This is a picture of our Swiss factory."

As the album was open there came out of it an air from "Fra Diavolo."

"Will you take a pinch of snuff?"

As the lid was raised there was a whisper of "Should Auld Acquaintance be forgot?"

"We have a customer who has a music box attachment to his front door, and his visitors are always greeted by a tune. A music box can be concealed in a very small compass, and one of the reigning demands is for articles that contain them so as to create pleasant surprises. Dolls, clocks, and books are provided with them. Nearly all of the music boxes are made in Sainte Croix or Geneva in Switzerland.

"The principle of manufacture is simple. The different parts comprise a brass roller, studded with fine points of the hardest steel, a steel comb the teeth of which give the sounds, a spring to give the revolving motion to the cylinder, and fly wheel or fan to regulate the revolving motion. The music has first to be arranged by a thorough artist. The cylinder which comes from the machine shop is then placed in the hands of a woman, who, with the aid of the music and a very ingenious machine, marks the places on the cylinder where the points are to be inserted. Another person drills all the little holes, and another inserts the points. The cylinder is then filled with molten cement, and then placed on the lathe and revolved quickly. The cement adheres to the inside surface, and thus holds the points. A hole is left in the center of the cylinder for the axis. The points are then filed down so as to be of equal length. The comb is tuned by a tuner, who first files the teeth without excessive care, to give them the proper flexibility, and then files them near the base to lower the tones, and near the points to sharpen the tones.

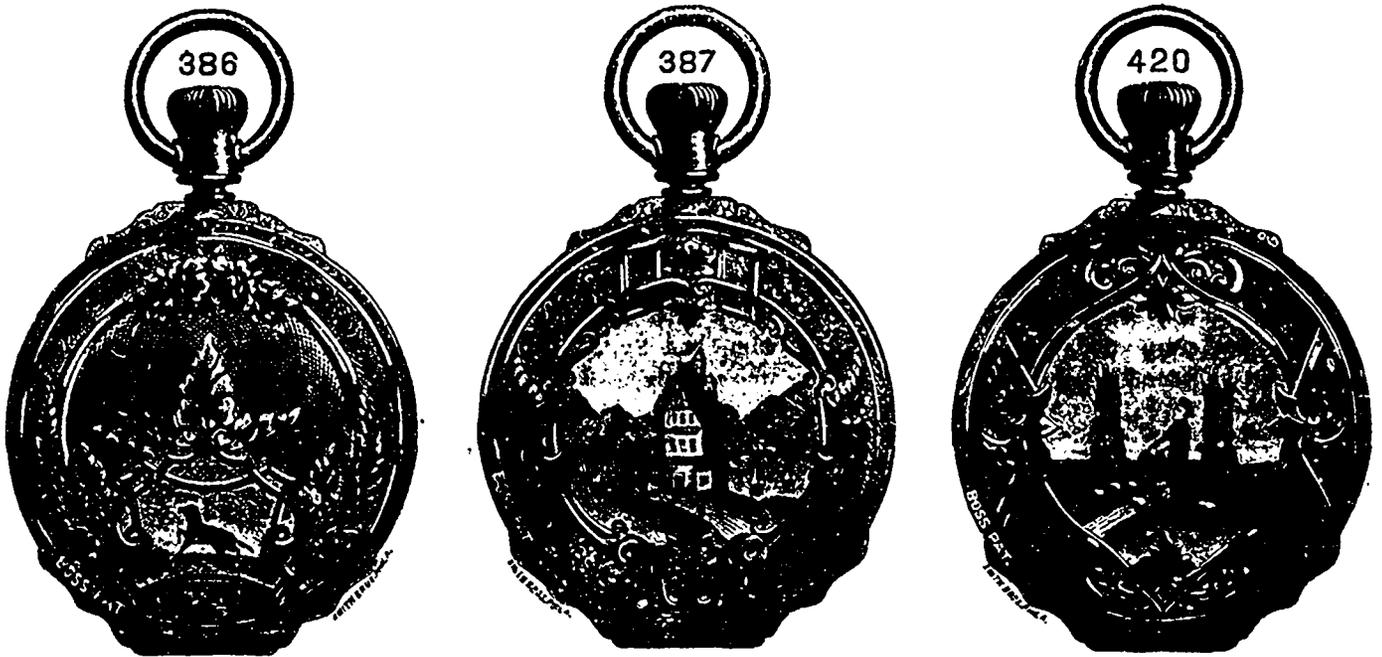
The operation of fastening the cylinder and the comb to the bed plate requires much accuracy, so that the points of the cylinder and the comb will exactly meet. A woman following the music then bends the points on the cylinder

# NEW LINE

—OF—

## Jas. Boss' Gold Watch Cases.

—THE LOUIS XIV OR BOX JOINT STYLE.—



*These Cases are engraved in all designs now being used on our regular goods, as well as a special line, particularly adapted to this style of case.*

**THE BOX JOINTS ARE ALL MADE OF SOLID 14k. GOLD.**

*The JAS. BOSS GOLD WATCH CASES are unapproached in quality, construction, finish and ornamentation.*

THE GOLD USED UPON THEM ASSAYS  $14\frac{2}{10}$  KARAT BY U. S. MINT ASSAY.

*All of the parts most subject to wear are made of SOLID GOLD. They are not gilded to make them look better than they really are, consequently will not change color in a short time, to the annoyance of the dealer and disgust of his customer.*

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For Sale by all Canadian Jobbers.

slightly forward in order to secure more strength, but more especially to make the chords drop more simultaneously and cause the runs or roulades to be played evenly.

"Size in music boxes increases both their volumes and richness in tone. A cylinder ten inches long can be made to play six, eight, ten, or twelve airs well, but it will play six or eight airs better and with more sweetness and harmony of sound than it can be made to play a greater number. The reason of this is that more points on the cylinder and more teeth in the comb can be used for each air if there are fewer airs. The space between the teeth decreases with the number of airs. If the cylinder is increased in diameter the airs may be prolonged."

"How long does a music box last?"

"It is like a watch. It will last a lifetime if it is good to begin with and is treated with care. Most owners of music boxes object to using them except for company. The fact is, a music box should be used every day, just as a watch should be wound up every day.—*Exchange.*

### THE LUNEBURG SILVERWARE.

To be mentioned as an interesting set of copies of the celebrated Luneburg (Germany) city council silverware, are those executed by two local firms. The fortunes of this treasure are sufficiently known. In the course of a year melted together to one-sixth of its bulk, it was still sufficiently important to constitute the chief attraction for the occasional tourist who came to inspect the sights of the old, reduced, hanseatic city. And it was a picture calculated to forcibly transport the sight-seer back into the old, proud, hanseatic times, as the old bailiff, himself appearing to be an heirloom bequeathed by the past centuries, opened a secret closet in the dark council chamber, in the dark brown wainscoting, and after having removed ponderous iron bars and doors, drew forth from an arched niche the treasure trove one after the other, and handed them to the visitor. And with the glittering luster lights of the old silverware, imagination might have peopled the moldy old room with the ancient venerable forms of the bargomasters and their assistant councilors, who, to the perpetual remembrance

of the discharge of their functions, had donated the single pieces of this service.

But, alas! romance is a little-honored guest in these, our practical days; in order to liquidate commonwealth debts, the modern fathers of the city listened only with too great an avidity to the sonorous offers made them by foreign anti-quarries for their "silver things." And little was wanting to let these master-pieces of ancient silversmithing wander the same road of the reliquies and mon-strances of our Rhenish churches in the first half of this century. But, happily, the state interposed at a right time, and without battering, became possessor of the Luneburg treasure, for the respectable sum of nearly a quarter million dollars. It also bound itself when the art treasure was incorporated into the art collection museum, in Berlin, to return a galvanic reproduction of those pieces with which it was possible, to the city of Luneburg. After many trials, these reproductions have most worthily been executed by the firms of D. Vollgold & Sohn, and Sy & Wagner. The pieces are entirely worked in the "deception style."—[*Ext. from German letter.*]

### THE SWEATING AND FREEZING OF SHOW WINDOWS.

During the winter season, especially when the gas is burning during the greater part of the day, many a store-keeper will have been at his wits' ends to devise a plan for the disagreeable sweating of the windows; it is the source of much trouble, and many hitherto employed means were useless until now. We believe to be sustained in our assertion that no remedy has been followed with as satisfactory a result as the one specified below. Since the inventor obtained a patent upon the process, it might interest the readers to find out what it is.

The invention consists of a fluid composition that prevents the dampening and sweating of windows. It is composed of 63 per cent. alcohol, glycerine, and a little essential oil (in a few cases, amber dissolved in alcohol, adequate to the conditions of the atmosphere). The proportions used by the inventor, Mr. Corn. Kerby, of Camperwell, are as follows: about  $\frac{1}{2}$  pound of glycerine to  $4\frac{1}{2}$  liters alcohol, and a little essential oil. The quantity of the glycerine varies according to its quality.

By the composition of the above specified ingredients, the essential oil is dissolved by the alcohol, and the fluid united with the glycerine. It may be done at ordinary temperature, and it is not whatever necessary to expose the mixture to the heat. This is applied to the inside of the window. The pane is either rubbed with a clean linen cloth, or else the fluid mass is applied with a camel's hair brush or "some sich," and the blind appearance of the glass, owing to overheating, is entirely overcome.—*Diamant.*

### SCENES IN A JEWELRY STORE.

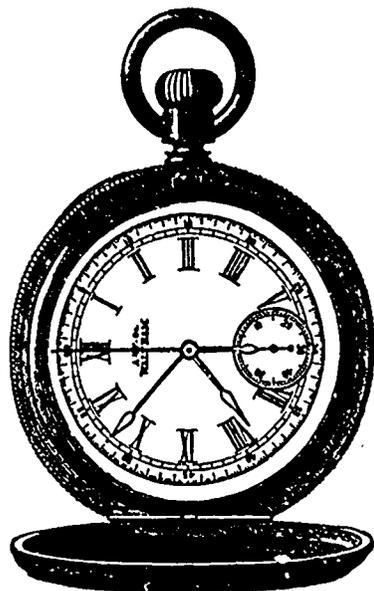
The trials of a hotel clerk are often cited as something beside which the afflictions of Job were but a side-show. But the hotel clerk's position is a paradise compared to that of the jeweler's, who combines with the selling of jewelry the repairing of watches, and whose place of business happens to be on a crowded thoroughfare. He is overrun with inquiries as to the correct time by hundreds of persons to whom he is under no obligation whatever, and asked to diagnose the complaints of hundreds of watches whose owners, after extracting a professional opinion gratuitously, and having their watches set to the correct time, take their departure with the remark that they "will get the darned thing fixed when they get home."

Our friend Hastings, an expert watch-maker, is situated in one of these unpleasant locations, and he declares that the amount of gratuitous work he does, if paid for at fair prices, would make his fortune in a year. Having a little leisure the other day, we drop in for a little chat with Hastings, well knowing that we should not interfere with his business, for he can chat to a friend without interrupting his work. Here is an outline of what occurred in the course of half an hour:

*Time, 11 A. M.; scene, jewelry store; Hastings at work at his bench, glass screwed in his eye, examining the intricate viscera of a fine chronometer. Enter fussy stranger.*

F. S.—"Can you fit me with a watch key? watch run down, lost key, want a new one."

HASTINGS.—"Certainly, Sir," replies Hastings, unscrewing the glass from his eye, and laying down his work regretfully. Hunts among the keys, fits one



—NEW—  
**CHRONOGRAPH**

—  
**STOP WATCHES**  
 —



—MADE TO—

**START, STOP AND FLY BACK,**

**WITH OR WITHOUT SPLIT SECONDS,**

MANUFACTURED BY THE

**AMERICAN WATCH CO'Y,  
 WALTHAM, MASS.**

By Patented Improvements in Construction, and considerable Diminution of the Parts required, as well as by the application of American Machinery, the AMERICAN WATCH CO. has so simplified the manufacture of Chronograph Watches as to greatly reduce their cost. They can now be obtained at prices which make them the MOST DESIRABLE timepieces for Sporting Purposes, AS WELL AS FOR GENERAL USE. Dealers can depend upon these goods giving satisfaction, as they will not require the constant repairs, nor subject the dealer to the annoyance experienced in most of the foreign watches of this class. In case of accidents, Duplicates of Broken Parts can be furnished by return mail. Cased complete in 16 Size Gold Open Face and Hunting Cases. (Open Face made to wind at figure XII.)

**ROBBINS & APPLETON,**

**General Agents,**

**NEW YORK.**

to fussy stranger's watch, winds it and sets it to the correct time.

F. S.—“What's the price of this key?”

H.—“Ten Cents.”

F. S.—“Ten cents! Holy mother of Moses! I can buy 'om of boys in the street for three cents. This is a swindle!”

H.—“You needn't take it if you don't want it.”

F. S.—“Take it! Of course I won't take it! Do you think I'll pay ten cents for a key when I can buy one for three? Not much!”

*Exit F. S. with indignation. Hastings resumes his seat, adjusts his glass, and goes to work on his chronometer.*

H.—“Now that's what I call a profitable customer. He comes in, interrupts my work, takes my time, gets me to set his watch going, and then mentally damns me for my good nature. But the world is full of his kind. He didn't want to buy a key; he knew he left his at home, but he wanted his watch wound and set; he had it done, and it wasn't in his nature to be grateful for the favour, so he makes up a lie for the purpose of getting a chance to abuse me. He'd rather lie than say thank you. I have lots of such customers; they're profitable, they are; piles of money in them.”

*[Enter German, evidently a market gardener.]*

GERMAN.—“Did you got some leetle watches for a lady?”

H.—*[Unscrewing his glass and putting away his work. He exhibits watches in great variety.]* “Yes, Sir; I've watches of all kinds. About what priced one do you want?”

G.—“Vell, I vant a nice leetle von for my girl. I'm going to be marrit next veek, and I vant to give de gal a nice leetle vatch. She is a nice gal, und makes pies for de bakery, und I wants to give her a pooty leetle vatch.”

H.—“Well, here's a nice one, gold case, back action patent lever escapement, fourteen holes for jewels, compensation balance wheel, independent movement, warranted to run a life-time. I'll sell you that for \$65.”

G.—“Dat's a pooty vatch, und dat pie gal vould look bully mit it on, but I dont vant to pay more as \$50 for a vatch. Deso is hard dimes, und I haf to vork too hart for dat money to pay so much. I gif you \$50 vor it.”

H.—“I can't afford to sell it for less than \$65. What difference does it make to you whether you pay \$50 or \$65—ain't you going to marry the girl, and won't the watch be yours again in a week?”

G.—“Dot's so, by gracious! I didn't dink of dat. If I gif dat pie gal de vatch un don marry her, den I own de gal und der vatch too, und if I haf to pay taxes on dot vatch, den I sell again. All right. I dake it for \$65. Put it in a piece of paper und write de pie gal's name on top of it. Perhaps you'll vant to buy it back pretty quick, dont it?” *Exit German with a grin on his face that makes his mouth look like the opening of navigation.*

*Hastings resumes his work, but hardly gets seated when an elderly portly gentleman, who, producing a \$10 silver watch, says:*

“Good morning, Hastings. Is that chronometer of yours right?”

H.—“Yes, Sir; exactly with the time-ball yesterday.”

E. P. G.—“I don't take much stook in that there time-ball. It varies. 'Spose there's a strong wind a blowin' when the ball ought ter drop, and the wind gets under the ball and holds it up, don't it lose time I want to know? Then it's a nuisance anyhow; a crowd of folks git around on the corners, a twistin' their blessed necks out of joint a watchin' for the ball to drop, and a lot of thievin' pickpockets goin' through 'em all the time. I lost a spectacle case that way last week, and got a crick in my neck a twistin' of it for to get a look at that blasted ball a droppin'. I believe that there been more'n \$50,000 stolen out the crowds watchin' for that ball by dodratted pickpockets. It's a nuisance, and the Board of Health ought ter abolish it afore people twist their heads off.”

H.—“Well, my chronometer has the right time.” *[Takes E. P. G.'s watch and pretends to regulate it.]*

E. P. G.—“Wall, if that's so, that watch of mine has lost ten seconds in two weeks. You guaranteed it to keep good time, and if you dont regulate it I'll throw it back on your hands.” *[Exit E. P. G.]*

H.—*[Resumes work.]* “That old buffer's worth a million dollars, but he's penurious as — Mophistopheles. His wife and daughters, however, buy a good deal of me, so I try to keep on the

right side of him. He came in two months ago and bought that \$10 watch, and expects it to keep as exact time as a Bliss Chronometer. He bothers me to death regulating it for him.”

*[Enter fast young buck with \$300 watch to compare time.]*

F. Y. B.—“Mornin', Hastings. How's your time? All right. Watch only gained seven minutes this week; she's comin' down to biz; don't care so long as she's fast, but don't let her get slow; shall die if she goes slow. She's a bully good watch, and I'm glad I got her. Give her a little turn backward, and I'll try her another week. Bye bye.”

H.—*[Having attended to young man, takes his seat and resumes work.]*

*[Enter little girl.]*

L. G.—“Mister Hastings, will yez plaze tell me mother what time it is?”

H.—“Half-past eleven.” *[Exit L. G. Returns again in two minutes.]*

L. G.—“Mister Hastings, will yez plaze tell vhat time it is?”

H.—“I just told you, don't bother me any more.”

L. G.—“Well, that wuz for me mother, and this is for Missus Finnigan, sure, who tould me to ax yez, and yez needn't git huffy about a little thing like that. Yez kin kape your old time if yez don't want ter tell it, an' I'll tell Missus Finnigan that yez tould her to go to the divil, and won't she be mad.” *[Exit L. G.]*

*[Enter an Irish sailor in an advanced stage of intoxication, accompanied by a wretched-looking woman, also intoxicated.]*

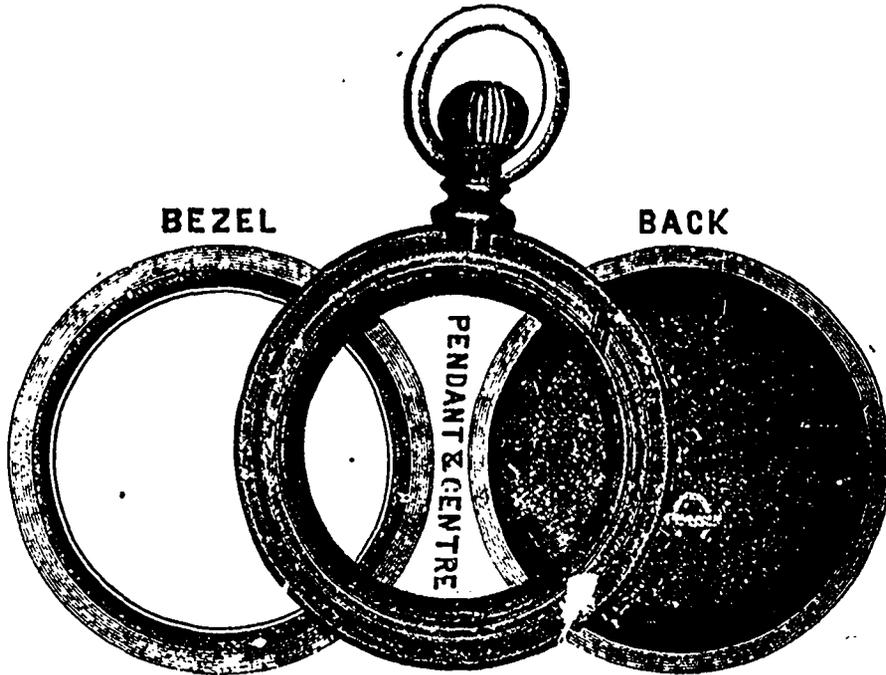
I. S.—“Say, mister, I want to see a ring; a wedding ring, do ye moind; we and the old gal here's goin' ter get spliced, and she sez she must have a ring. Give us a goold one, not too big, and a chape one, too.”

W. L. W.—“I'll not have a chape one, sure. I want one as good as Moll McFadden's, or you'll be no husband uv moine, do yez hear that. Sure, I'm not so hard pushed fur a man that I'm goin' to be put off wid a brass ring. Not much I ain't.”

I. S.—“Heuld your whist, old gal. Sure, hain't I bought lots ov weddin' rings afore, and don't I know vhat I'm doin'. Sure, I'll fix you all right.” *[A ring is finally selected, and a compromise made on a dollar and a half.]*

W. L. W.—“That's very good of yez, Jack. It bates Moll McFadden's ring to smidereens. Shure, now, I'll have

# THE BEST THE "EXCELSIOR"



*What we Claim in the "Excelsior" Patent Dust-proof Case:*

1. The Strongest Case made.
2. The only Case made hard and left hard.
3. No solder or heat to soften the gold or silver.
4. No parts that wear out.
5. No joints to break off.
6. The most perfect-fitting Case made.

TRADE



MARK.

**Instructions to open the "Excelsior" Patent Dust-Proof Case.**

Press the Crown as in any ordinary case, turn bow to the right to open Bezel, and to the left to open back.

me name put on it. Not my name, but what it will be after we're married. What that is, sure I don't know. What the divil is your name, anyway, Jack? Faith, I never saw yez till to-day, un' only heard yez called Jack."

I. S.—"Well, Miss Maginnis, yer name will be Mrs. Jack O'Donnel as soon as the priest has said the words, and that's as good a name as any in the Booklyn Presbytery."

W. L. W.—"True for yez, Jack; but I'm thinkin' I'm not the only woman that wears it. But divil a moind do I moind. I'd marry yez if yez was Brigham Young. I'll be as honest a woman as Moll Maginnis ony way." [Exit happy couple on their way to the priest.]

Lunch time having arrived, Hastings put on his coat and steered us for a lunch counter, having lost nearly half a day attending to the wants of a lot of people who gave him "more kicks than hapence," and whose aggregate purchases were summed up in the \$1.50 wedding ring bought by the drunken Irish couple and the \$65 watch sold to the German gardener.—*Exchange.*

### AFRICAN DIAMOND DIGGING.

Fancy, if you can, a pit half a mile long, and say one-third of that space wide. The walls of this chasm are of blue slate, the bottom where the men are at work is a mass of concrete gravel and cement. It is in fact a crater or the mouth of an extinct volcano from the bowels of the earth. In this oval shaded pit, which is now excavated to a depth of perhaps five hundred feet from the margin, from eight to ten thousand people are at work digging and delving into the gravelly debris at the bottom. The claims include a space within this pit of diamonds thirty-two feet six inches in surface measurement. These claims are in some cases owned by individuals, and in others by companies who have bought up a group of claims and work them under the direction of overseers. The digging is done by natives, most Kaffirs, who work half naked in the concrete debris. To every group of diggers there are usually four white watchmen, who sit and watch when a native discovers a diamond, and over these watchmen an overseer, who makes a record of every "find" made by a digger. A premium of one penny to the pound sterling in value

is offered in addition to the regular daily wages for every diamond found. When a native finds a stone he cries out and passes the brilliant to the watcher, and it is handed by him to the overseer, who in turn sends it to the office of the company. Each of these men—the finder, the watchman, and the overseer—receives a price or premium on the discovery made, and this acts as a check upon fraud, each man claiming a premium upon every stone found. From every claim in this pit a double wire cable runs to the level ground at the surface, and upon this aerial railway little cars run up and down. The diamond dirt, when it reaches the surface, is taken out into a field and scattered, and there left exposed to the sun and atmosphere, which pulverizes the cement like dirt. After two or three days' exposure the natives throw water upon the dirt, and then commence the second search for gems. They are picked up by natives almost naked and handed to overseers, who take them to the general office. This dirt is afterward sifted and again sorted, and after a second overhauling is carted away and a new crop laid out for inspection. Notwithstanding the closest vigilance diamond stealing is carried on very profitably. The half naked Kaffir sometimes succeeds in placing his naked foot upon a diamond and works it up between his toes and so carries it off; or he will stoop down, pick up a precious stone and put it into his mouth; or, pretending to scratch his ankle, slip a gem into his fingers and thence into his ear. The most common mode of diamond stealing is to rub small sized stones into the dense mass of wool which crowns the head of the native African. Some blacks have been caught with as much as \$6,000 worth of diamonds in their hair. It is a common expression among the watchers that "we can always tell when a stone has been discovered—the African always trembles." *Jewelers' Circular.*

### BUSINESS CHANGES FOR AUGUST.

Wright & Wright, Hardware and Tins, Brandon, Man., assigned in trust and compromised at 50 cents on \$.—J. B. Carr, Jeweler, Winnipeg, selling out by auction.—H. C. Smith, Jeweler, London, absconded.—J. H. Hughes, Hardware, Schomberg, burned out.—Levetus Morris & Co., Jewelers, Toronto, sold out by the sheriff.—Henry Grant, Jeweler, Montreal, has admitted his son, S. S. Grant, as a partner, style now, H. Grant & Son.—Wm. Doran, Jeweler, Emerson, Man., sold out.—W. S. Mc-

Gregor, Hardware, Walkerton, sold out to S. Bricker & Co.—Egger & Co., dissolved, John Egger continuing and admitting H. O. Sullivan, under the same name.—Meaford, Ont.: James Clelland, Hardware, and R. Wood, Jeweler, burned out.—Alex. McGowan, Hardware, Shelbourne, moved to Orangeville.—E. Needham, Jeweler, Shelbourne, burned out.—A. V. Van Norman & Bro., Jewelers, Winnipeg, selling out by auction.—Chilton & Campbell, Jewelers, Ottawa, dissolved, J. P. Clinton continues in his own name.—N. Germain & Co., Hardware, Winnipeg, sold by assignee at 55 cents on the \$.—Williams & Hill, Hardware and Tins, Winnipeg, assigned in trust.—H. T. Marsh, Hardware, London, sold out his retail hardware business and continues in wholesale saddlery and carriage trimmings.—Hammond & McKeever, Tins and Crockery, Winnipeg, assigned in trust.

### BUSINESS NOTES.

Mr. A. C. ANDERSON, jeweler, of Hamilton, called on us the other day, and looks splendid after his English trip. A. C. says prospects are good.

THE stock-in-trade of H. P. Cooke, of Gravenhurst, valued at \$6,637, was sold to Messrs. Crompton & Ryan, of Barrie, Ont., at 73 cents on the dollar. The stock consisted of dry goods, groceries, hardware, etc.

WE are glad to see the Toronto jewelry buyers, Messrs. John Segsworth, H. Smith, and W. F. Carrier safely back again at their old quarters. They all look better for their outing, and we trust may be able to push trade this fall all the better for it.

WHEN the Canadian Pacific Railway Company took over from Government the line from Prince Arthur's Landing to Winnipeg, they named their station at the former place, "Port Arthur." The name commended itself to the townspeople, who held a meeting recently, and resolved to call the town Port Arthur.

THE foundry business of Mr. Wm. Hamilton, Peterboro', is to be carried on by a limited liability company, known as the Wm. Hamilton Mfg. Company. Capital, \$200,000. The letters patent have issued to George A. Cox, Wm. Hamilton, Geo. Munro, Andrew Macfarlane, and Richard Hall, all of Peterboro'.

INFRINGEMENT REGISTRATION.—Messrs. Green-shields & Co., acting for Thomas Allan, jeweler, of St. James street, have entered an action against Mr. Cochenthaler for \$5,000 damages for making and selling a species of jewelry which the plaintiff has registered at Ottawa. The distinctive feature of the jewelry in question is that it consists of curved snowshoes with the tuque and thongs.

FOR the shortest business run on record the palm must be awarded to J. M. Provost, a store-keeper of Hochelaga, Que. He opened about the 7th May on \$200 borrowed capital, bought about \$500 worth of millinery goods, on the sale of which he has lived, paying not one cent to any of his creditors. The trustee to his estate now advertises remaining assets of \$200 for sale.

# SIMPSON, HALL, MILLER & CO.,

WALLINGFORD, CONN

—MANUFACTURERS OF—

## Artistic and Useful Hollow Ware,

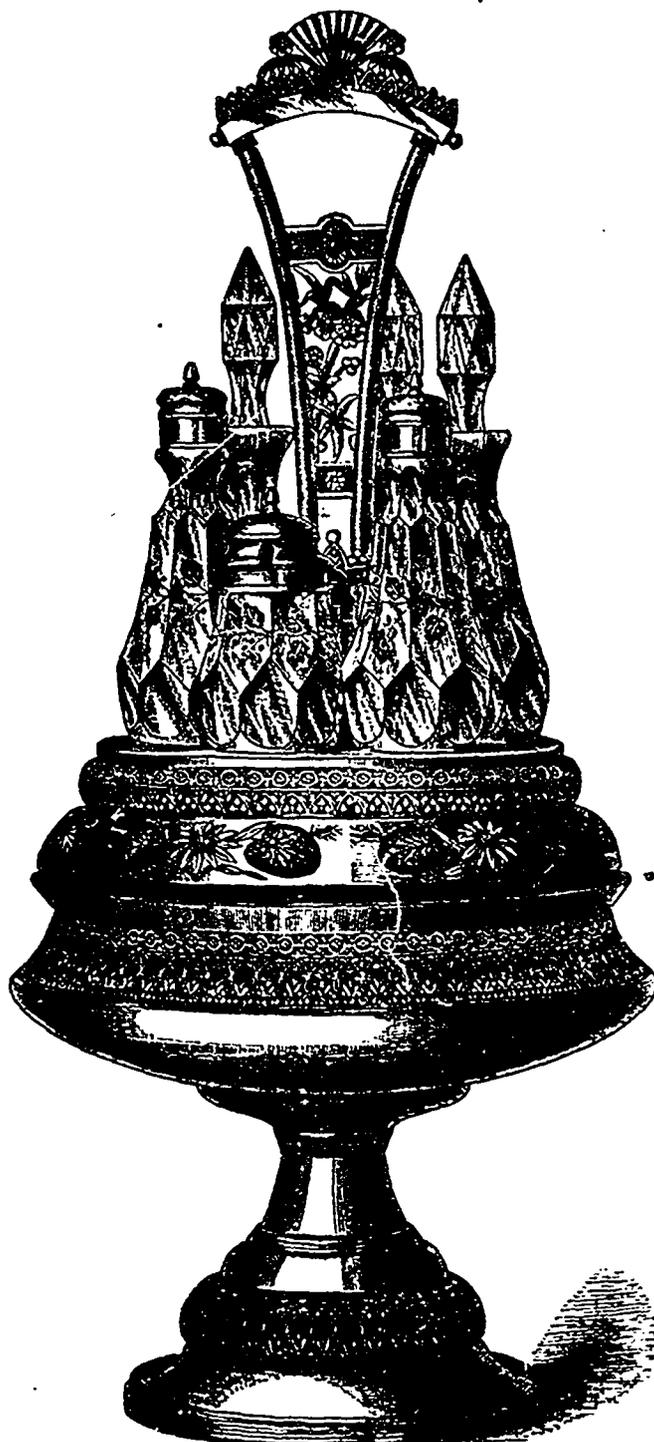
ELECTRO PLATED UPON FINE HARD WHITE METAL.

*There is nothing in Designing, Ornamentation or Manufacturing which our artists and workmen cannot produce.*

*Our Facilities for Executing Fine Work are Unexcelled.*

*Our Assortment is Suitable for the Best Trade.*

*We carry a stock of manufactured goods sufficient to meet the demands of the largest trade.*



*Spoons, Forks, etc., plated upon the Finest Nickel Silver in*

*Extra, Double, Triple, and Sectional Plate.*

*Full lines of over*

*Forty Staple and Fancy Pieces*

*in each Pattern in Geneva, St. James Countess, Windsor, Oval Thread, etc. Made under the supervision, and quality guaranteed, and controlled by Wm. Rogers, formerly of Hartford and Meriden. (Wm. Rogers, Sr., died 1873.)*

**WM. ROGERS,  
Wallingford, Conn.**

No connection with any concern in Waterbury, Meriden or Hartford, using name of Rogers in any form.

**FACTORIES : WALLINGFORD, CONN., U.S. AND MONTREAL, CANADA.**

MOWAT BROS., general store men, of QuAppelle and Regina, are said to be asking an extension of 2, 4, 6, and 8 months. Their statement shows liabilities of \$5,000, and assets \$47,000. Doubt is expressed as to their being able to effect this arrangement with creditors, as there are several suits now proceeding against them.

MR. W. K. McNAUGHT, of the firm of Zimmerman, McNaught, & Lowe, who has been absent in England for the past few months with the Canadian Lacrosse Team, arrived in Toronto last week. He speaks highly of the reception of the Team everywhere, and thinks they accomplished much for Canada as amateur emigration agents. Mr. McNaught says he feels ten years younger as the result of his trip.

THE storehouse and two of the mills of the Acadia Powder Company near Halifax were blown up on Friday last, one man being killed and two wounded. In the storehouse was 270 pounds gunpowder. Neither of the two mills destroyed contained much powder, that which caused the explosion being about the floor and clinging to the wooden walls. Had the drying rooms of the works, a short distance away, gone up, three tons of powder would have exploded.

IMMIGRATION INTO Canada is not slow this year, as may be seen by comparing this year's figures with those of last. The aggregate number at 31st July last, reached 72,281, as compared with 59,939 to same date last year. The total arrivals numbered 121,019 as against 114,078 in seven months of 1882. But of these 48,838 persons were passengers through Canada to the United States, a smaller proportion than in the previous year.

FUNNY.—Deubers and Ladds, both watch case makers, are at it hammer and tongs, and if the public can believe the bulletins each issues weekly about the other, both of them are precious scoundrels, who should be in jail for deceiving an innocent and unsuspecting public.

The probability is that although much of what is alleged by each against the other is untrue, where there is so much smoke there is sure to be some fire smouldering beneath the surface, and if these exposures do no good in making either of them raise the standard of their goods, it may at least have the effect of putting the public on their guard to see that they get goods from reliable houses.

With all their wordy fury, however, we should not be surprised to see these belligerents, when they meet, instead of coming to blows, as they should do, quietly shake and adjourn to some bar contiguous to Maiden Lane and "smile" at each other.

UNDERVALUATION OF GOODS.—Says a Toronto exchange:—"There has been a flutter amongst the wholesale jewelry trade of the city since the establishment at No. 15 Toronto street of a branch of the firm of Stewart, Dawson & Co., of No. 2 Ranelagh Place, Liverpool. Joseph Bland is the agent here of the Liverpool firm. It has been rumored for some time that the local dealers were being considerably undersold by the new firm, and enquiries began to be set on foot as to how Mr. Bland managed it. As a result of these rumors the custom authorities here have made two seizures of English and

Swiss watches and jewelry consigned to Mr. Bland from Liverpool for undervaluation. The first was made on April 9th last, when a package of jewelry invoiced at \$571 was seized. Assistant Appraiser Miller valued the goods at \$850. On June 30th last, another package invoiced at \$633, which the appraiser valued at \$950, was seized. Accordingly, an investigation is now in progress at the custom house, which will, it is understood, last a couple of days longer, when the evidence will be forwarded to Ottawa. Several leading wholesale dealers and experts have given testimony. Mr. Booth is represented at the investigation by Mr. Walter Barwick, and Hon. James Patton, collector of the port, is presiding over it." We have since been informed that the custom authorities have decided to add 25 per cent. to the face value of Messrs. Stewart, Dawson & Co's invoice, and make them pay duty on this amount.

HOW OTHERS LOOK AT IT.—The Montreal correspondent of the Toronto *Mail*, referring to the recent jewelry seizures, says.—"The extensive seizures of jewelry alleged to be smuggled in here from the United States and sold by agents to the two establishments owned by Messrs. Eaves is causing a good deal of interest, not only in that department, but in hardware, fancy goods, and other kinds of commerce, in which it is alleged by the Custom officials a vast deal of smuggling has been carried on for some time past. An extensive fancy goods merchant assured your correspondent to-day that those merchants doing a legitimate wholesale importing trade in the city have to compete against agents of American manufactories in Boston and New York, whose travellers surreptitiously brought in goods *via* St. Johns, N. B., and Halifax, as well as Montreal, without paying the duty, or perhaps no more than a small proportion of the duty, to the city Customs authorities. These same importers are charged with having the effrontery to open the goods out in private rooms in hotels here where they offer them at such a price as undersells the importer who not only pays the legitimate revenue, but also an annual tax to the city government for doing business. This kind of illegitimate trade has driven a great many honest merchants out of business here in jewelry, fancy goods, and other departments. It is stated on good authority that disclosures are on the  *tapis*  regarding how large profits have been made in hardware on which the importers got a larger rebate from the duty than they were entitled to. The Government has been investigating matters, and is said to be in full possession of the *modus operandi* by which these swindles have been successfully perpetrated. Developments of a startling kind are expected shortly."

WHY IT IS.—We have often been asked how it was that small "wholesale dealers, as they grandiloquently term themselves, boasted that they were able to, and in many cases did undersell the regular wholesale houses in the jewelry trade. We have pointed out on more than one occasion that these small dealers do not know any more about the business than their larger competitors, their money is worth no more and consequently they can buy goods no cheaper, and that as a consequence the only way in which

they can honestly undersell them is by selling their goods at cost, a thing that no one would ever give them credit for doing. That they often sell at honest dealers' cost, there can be no question, and the only possible explanation is that they either don't intend to pay for their goods or else they smuggle them into Canada. The latter is probably the correct solution of the query. As most of our readers are aware, the Customs' authorities have become more vigilant of late and several of these gentlemen have been brought to book. Amongst others, two firms in Montreal have got into the toils of the law, and the *Montreal Gazette*, in speaking of the affair, remarks, "It was stated a few days ago that the case against the smuggling jewelers would probably be settled on payment of a fine. This has been the case, the amount being \$7,000 from W. Eaves, and \$3,500 from E. & A. Eaves. The Customs officers received their portion of the fine on Saturday, the Government no doubt finding prompt agents and informers' payment a successful means of preventing smuggling, of which there will probably be very much less for some time to come, those in that line of business having been well scared."

This is a pretty severe lesson, and it is hoped that the parties may profit by it to their own good and that of the rest of the trade. They will look at the old adage, "Honesty is the best policy," in a different light from what they formerly did.

## WORKSHOP NOTES.

HARDENING DRILLS.—Drills for goldsmith's use are best hardened in oil or sealing-wax, when strongly heated red-hot.

SILVER SOLDER.—Melt 43 parts fine silver, 4 part copper, and 23 parts brass under powdered charcoal.

BENDING GLASS TUBES.—Fill the tube with finely sifted sand, close both ends, and heat it over the flame of a Bunsen burner. It may thus easily be bent, without losing its roundness at the elbow.

—Turquoises which have become green, can in no manner be restored again to their original color. Books and periodicals sometimes contain recipes, such as boiling in wine, milk, etc., but it is all to no purpose.

VERDIGRIS.—Copper, or its alloys, may be cleared of its oxidized spots by the application of spirits of sal ammoniac, wiping with silk paper. If the offensive places do not become cleansed at once, a second application will surely effect it.

SILVER WASH.—To quickly silver wash articles of copper or brass, mix 3 parts of chloride of silver, with 20 of cream of tartar, in very fine powder, and 15 of pulverized table salt. Add sufficient water, and bray the mixture until it becomes a paste, which rub with a piece of blotting.

TO CLEAN RUSTED STEEL.—The *Chemiker Ztg.* says that rusted steel can be perfectly cleaned by hard brushing with 30 gr. cyanide of potash, 30 gr. castile soap, 60-gr. pulverized

Highest Honors Awarded at the Toronto Exhibition, 1882,  
**TWO SILVER MEDALS AND A GOLD MEDAL!**



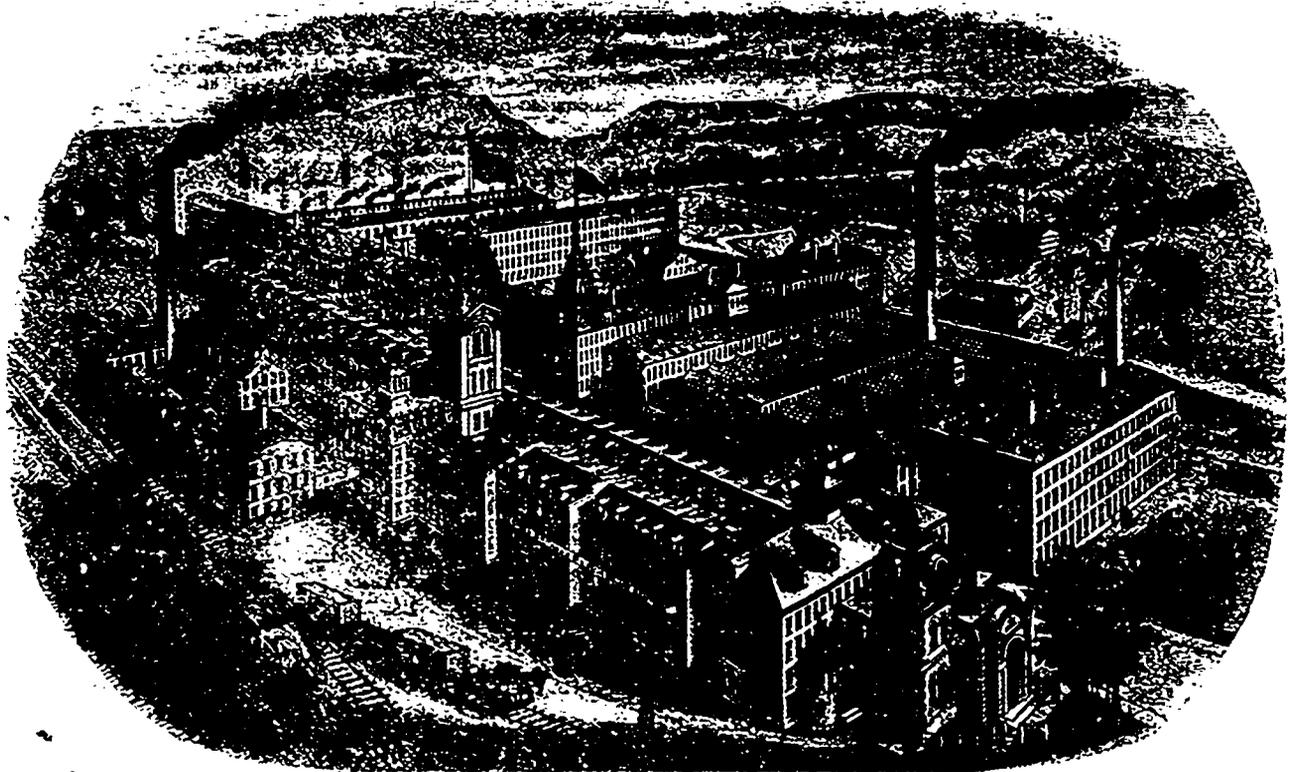
# Meriden Britannia Co.

MANUFACTURERS OF STANDARD

**ELECTRO, SILVER AND GOLD  
 PLATE.**



WAREHOUSES: Chicago, Ill., San Francisco, Cal., London, Eng.



WAREHOUSES: Union Square, N. Y., Meriden, Conn., Hamilton, Ont.

**MANUFACTORIES: Meriden, Con., U.S. and Hamilton, Ont.**



**OBSERVE**

this Trade Mark is stamped on all Hollow  
 Ware of our manufacture.

**TRADE**

**1847, Rogers Bros., A I,  
 OR  
 1847, Rogers Bros., XII  
 MARK.**

**OBSERVE**

this Trade Mark is stamped on all  
 Knives, Forks, Spoons and  
 other flat ware of our manu-  
 facture.

*The A 1 Goods are Standard Heavy Plate, and XII signifies that in addition the articles have an extra quantity of Silver on all the parts most exposed to wear.*

The Meriden Britannia Company have been awarded the highest premiums wherever exhibited, from the WORLD'S FAIR, 1863, to the PRESENT TIME, and the high reputation of our Goods throughout the world has induced other makers to imitate our Trade Marks and name as well as our designs, and as many of our patrons have, through a similarity of names, purchased inferior goods under the impression that they were our manufacture, we are compelled to ask especial attention to our Trade Marks.

**THE FACT THAT OUR NAME AND TRADE MARKS ARE BEING SO CLOSELY IMITATED SHOULD BE A SUFFICIENT GUARANTEE TO THE PUBLIC THAT OUR WARES ARE THE BEST IN THE WORLD.**

**WE RE-PLATE OLD WORK AND MAKE IT EQUAL TO NEW.**

and washed chalk, and water sufficient to make a dough; care, however, should be used in its application.

**CLEANING SILVER.**—The simplest and quickest agent for cleaning silverware is the hyposulphate of soda. It operates rapidly, is cheap, and has not yet been proposed for this purpose. A rag or brush, moistened with a saturated solution of this salt, quickly cleans heavily oxydized silver surfaces in a few minutes.

**TRANSPARENT SIGNS.**—To heighten the effect of the sign of a firm, a sign maker in Hamburg places colored or white glass splinters between two glass plates covered from within with a covered coating, except the necessary letters and figures, and the penetrating rays of light shine through the splinters and break into all the prismatic hues.

**ARGUZOID.**—This is the name of a new alloy coming from Glasgow. It is said to be far whiter than nickel plating, and can hardly be distinguished by the color from silver. Although 50 per cent. dearer than brass, articles made of it are cheaper than those plated or galvanized with nickel. The resistance to pressure of this alloy ranks immediately after silver, resisting 16 tons, while brass bears 10, and phosphor bronze about 14 tons. It stands equal to brass in ductility. The virtues of its resistance to temperature are at present under trial.

**GALVANIC GILDING.**—Phosphate of soda, 60 parts; bi-sulphate of soda, 10, cyanide of potash, 1; chloride of gold, 2.5; distilled water 1,000. The water must be divided into three parts: 1st part, 700 parts, in which the phosphate of soda is dissolved; 2nd part, 150 parts, for dissolving the chloride of gold; 3rd part, 150 parts, for dissolving the bi-sulphate of soda and cyanide of potash. The first two solutions are little by little mixed together, and the last is then added. For this gilding, to be heated to 40 to 55° R., use a platinum anode, and add fresh portions of the salts of gold when the solution is exhausted.

### SCIENCE NOTES.

DURING the first four days that the Parcel Post was in operation nearly thirty thousand parcels were delivered in London: the number collected in the metropolis during the same period amounting to about seventy thousand. The deliveries on the second day showed an increase of six thousand packages on the first day. Great satisfaction has been expressed as to the general working of the new service. The average weight of the packages forwarded for transmission has been about three pounds.

It is a wonderful fact that shipping, as old as civilization and once the great carrier of the world's commerce, has been far outstripped in its capitalized value by the railroad, an institution but little more than fifty years old. The value of British shipping is \$1,000,000,000; value of British railroads, \$3,700,000,000; value of American railways, \$6,300,000,000. Great Britain herself, the queen of marine commerce, finds her railroad investment to treble that in shipping, while the American railroad plant nearly doubles in value that of the Mother Country.

IVORY is growing dearer by reason its of scarcity: the stock in the market is very low. Sheffield ivory has advanced from £1 to £4 per hundred weight, and a rise in the price of ivory handles is in contemplation. The cholera epidemic in Egypt has greatly interfered with the sale of African ivory, and it is very probable there will be no supply from Egypt this year. At the ivory sales in London, last week in July, 120 tons were offered, and all with the exception of about five tons, was bought at considerably advanced prices.

A BRITISH Treasury minute as to the reduction of charges for telegrams states that the sixpenny telegram is to be introduced on October 1, 1884. The necessary preliminary expenses of the measure are expected to amount to half a million sterling, of which 200,000 or \$1,000,000 will be expended in the current financial year. The receipts for the first year of the experiment, 1884-5, are estimated to fall short of the revenue by about £200,000. The supplementary estimate issued on the 4th inst., shows that a further sum of £339,456 is required by the British Post Office during the present financial year for working the parcels post.

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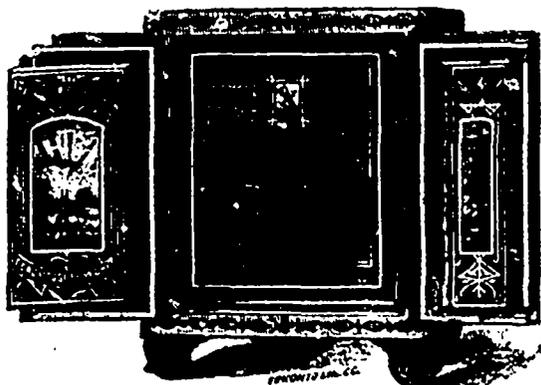
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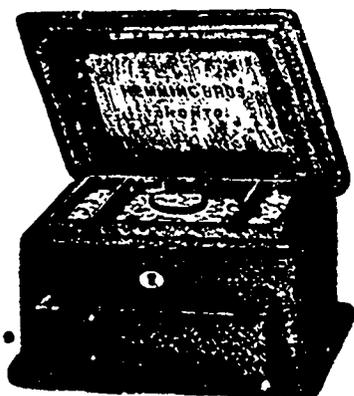
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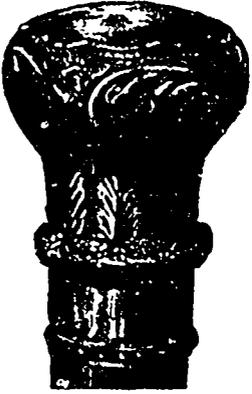
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