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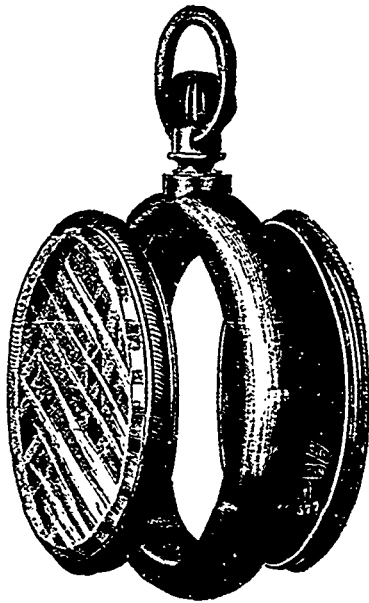
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A DRIVE IN SILVER CASES.

*18 SIZE, SCREW BEZEL,
PENDANT SET.*



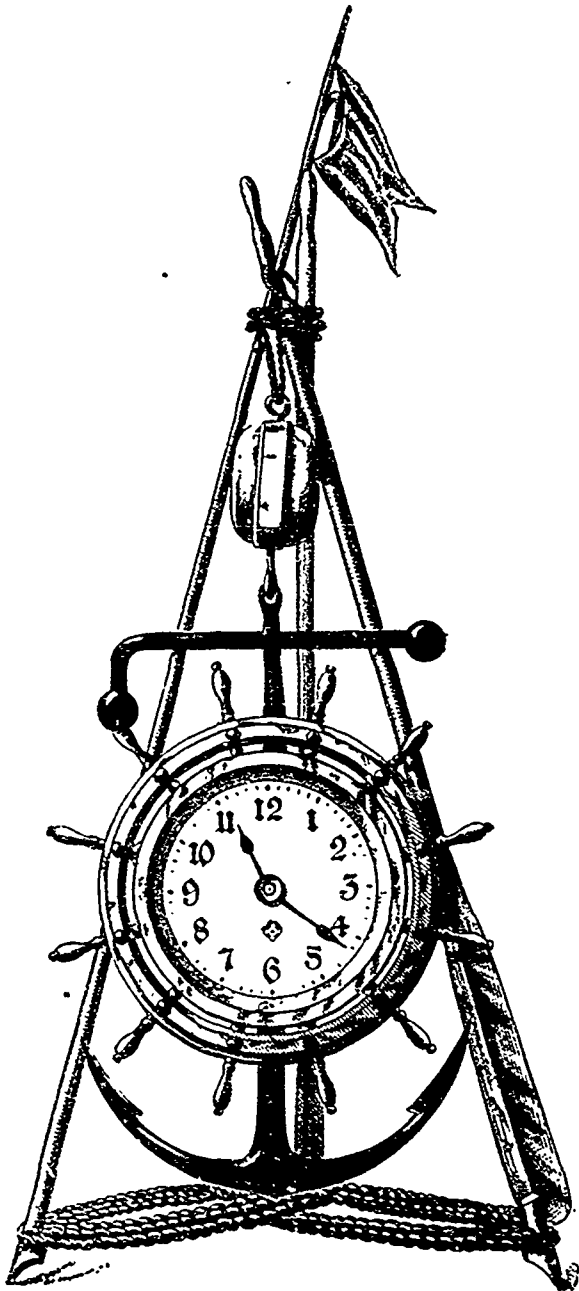
NEVADA VERMICELLI BORDER.

DISCONTINUED GOODS.

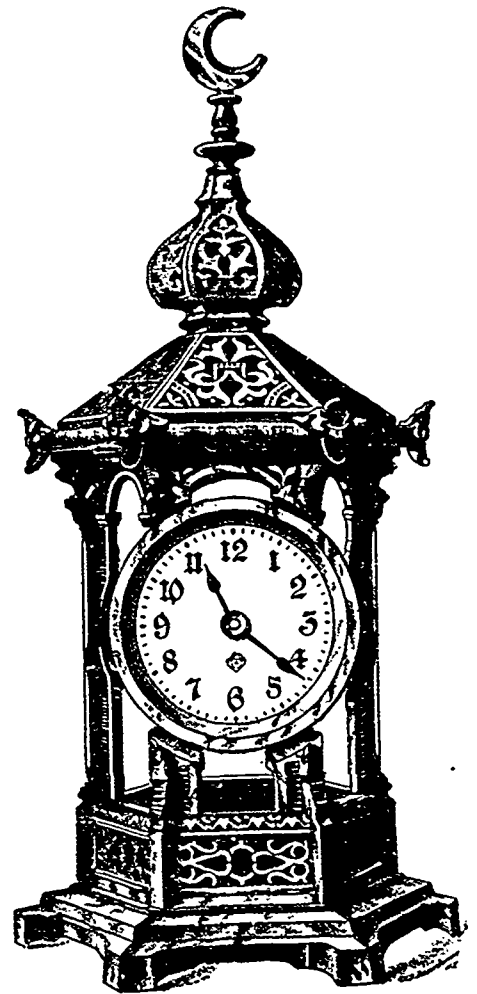
WE have closed out from the American Watch Case Company a large quantity of the above very **DESIRABLE GOODS**, and offer them at **CLOSE PRICES**. These cannot be repeated, so the Trade will do well to place their orders without delay.



NOVELTIES IN ANSONIA CLOCKS



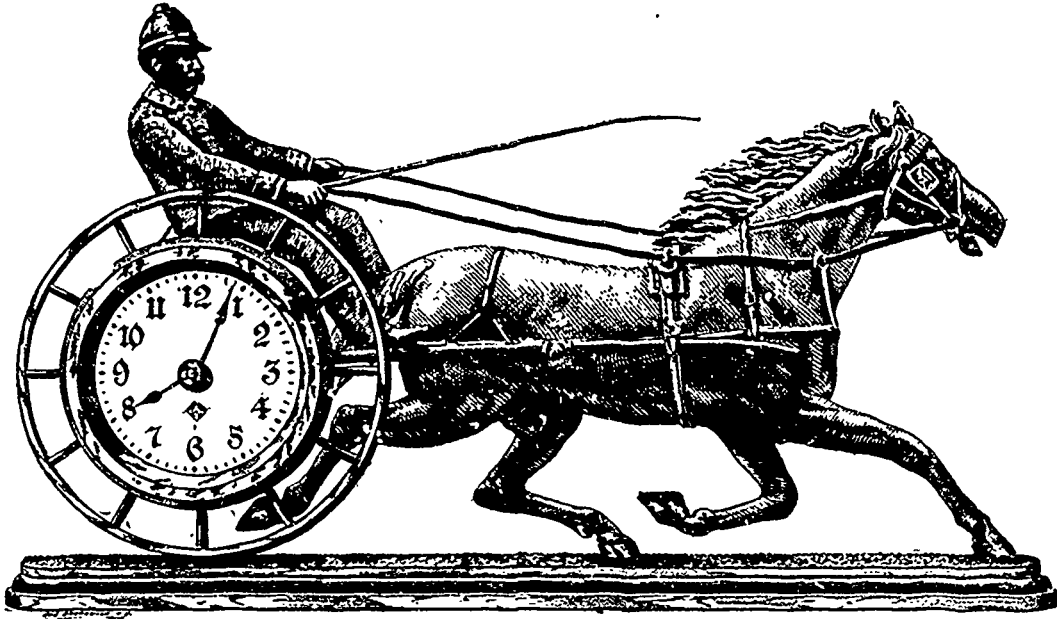
NAVY.—8 Day, Time.



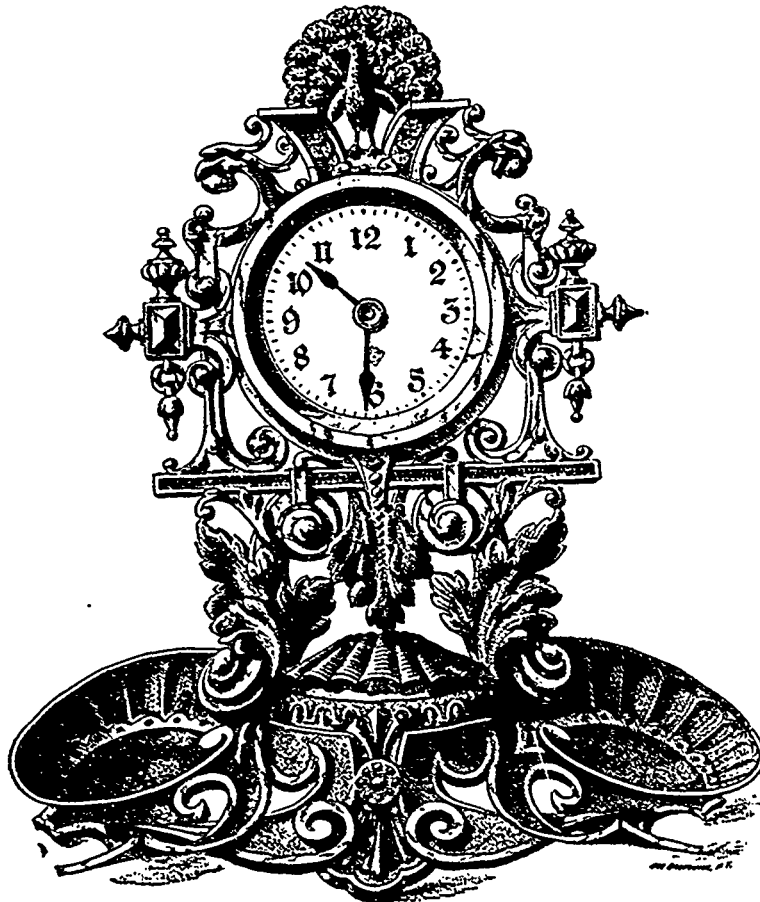
TOWER.—8 Day, Time.



NOVELTIES IN ANSONIA CLOCKS



TROTTER.—8 Day, Time.

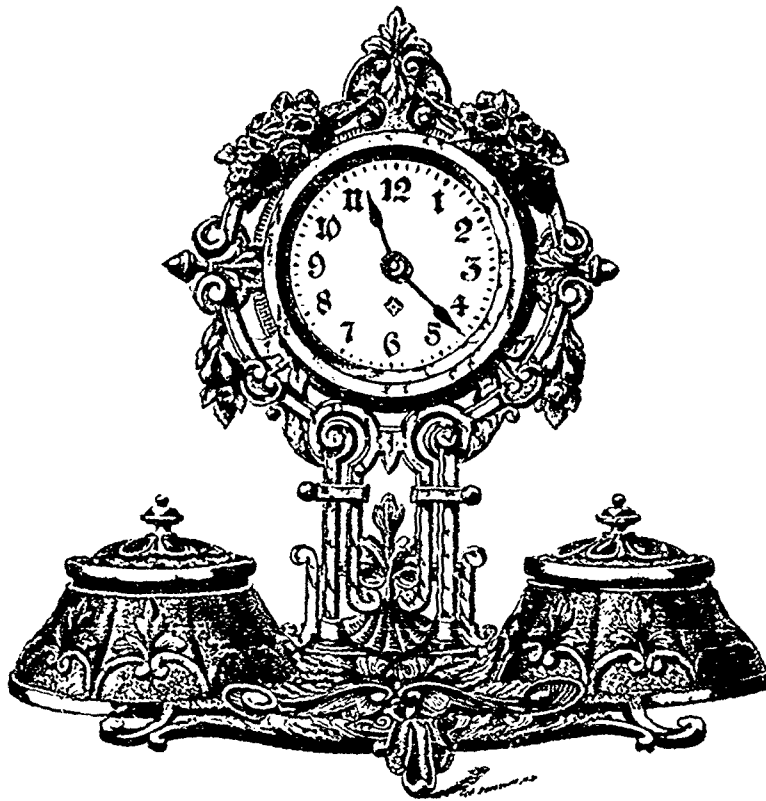


PEACOCK.—8 Day, Time.

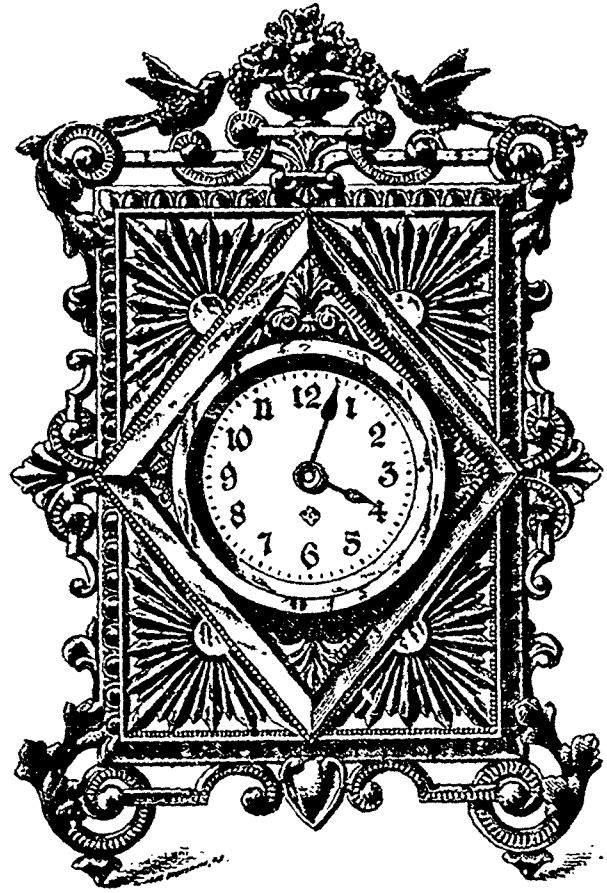
Agents for Canada, The Goldsmiths' Stock Company of Canada, Limited.



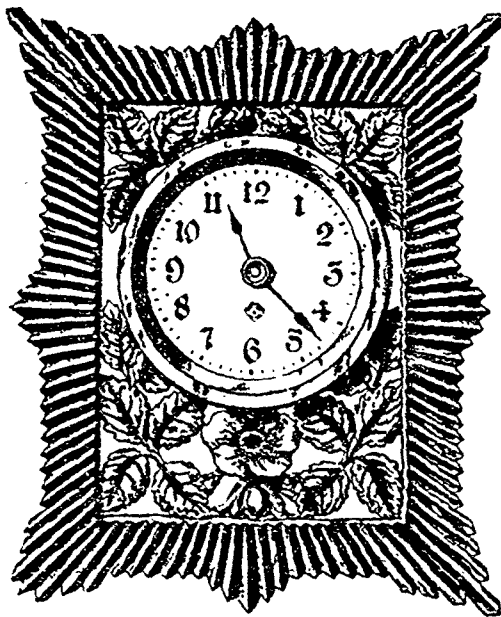
NOVELTIES IN ANSONIA CLOCKS



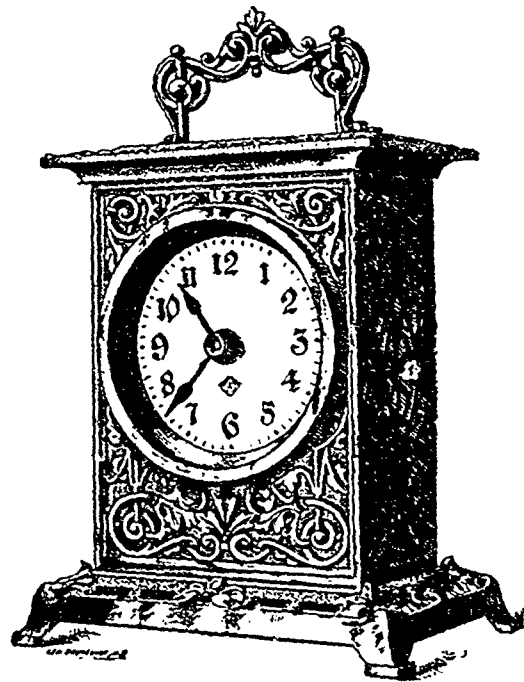
BEE INK.—8 Day, Time



DAWN.—8 Day, Time.



FLOWER.—8 Day, Time



BEE CARRIAGE.—8 Day, Time.

Agents for Canada, The Goldsmiths' Stock Company of Canada, Limited.



TORONTO, ONT., MAY, 1890.

The recognized organ of the Jewelry and kindred Industrial Trades of Canada. Published on the first of every month, and sent free to every dealer in jewelry, and kindred goods in the Dominion of Canada. Price to all others \$1.00 per annum, payable strictly in advance.

Our rates for advertising will be found very low, and will be made known upon application.

We shall be glad to receive correspondence from all parts, and will publish such letters as will be of interest to the Trade. We do not, however, hold ourselves responsible for the opinions of our correspondents. The name and address must invariably accompany the communication, not necessarily for publication, but as a guarantee.

All business and other communications should be addressed to

THE TRADER PUBLISHING CO.

67 ADELAIDE ST. W., TORONTO, ONT.

SPECIAL NOTICE.

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

EDITORIAL.

THE DUTY ON DIAMONDS.

NO little excitement was aroused amongst the jewelry trade during the past month on account of the proposed action of the Government in taking unset diamonds off the free list, and making them pay a duty of ten per cent. ad valorem.

It was felt by both the manufacturers, jobbers, and retail dealers in these goods, that such a change in the tariff must operate very seriously against the honest importer, who would pay the duty imposed upon them, while his less scrupulous competitor, whose conscience did not interfere to prevent him from smuggling, would have a big pull over him in securing the business.

There can be no doubt that as an incentive to smuggling, no better means could be devised than putting a duty upon goods so valuable and easily concealed as diamonds undoubtedly are

For this and other reasons which will at once present themselves to the minds of our readers, it was decided by some of the leading jewelers of Toronto, Montreal and London, to send a petition down to the Hon. the Minister of Finance, asking him to reconsider the matter, and again place unset diamonds on the free list.

This petition, we are glad to say, was favorably considered by the Hon. Mr. Foster, Minister of Finance, with the result that diamonds were again placed on the free list, while all other precious and imitation stones will hereafter pay a duty of ten per cent. ad valorem, instead of twenty per cent. as heretofore.

This concession to the manufacturing jewelry industry, while small in some ways, will no doubt help it materially in certain lines, especially that of gem rings. These goods are

now sold by the Canadian manufacturers, thanks to our National Policy, almost as cheaply as they can be purchased in Birmingham, and anything which will help to reduce the cost of the raw material to these gentlemen will tend to put not only them, but their customers in a better position to do a profitable business.

HOW IT IS DONE.

OUR readers will remember that some months ago we published a letter from an Eastern jeweler, in which he stated that two customers of his brought in watches for appraisal, saying that they had got them as premiums from a wholesale grocery house in Montreal. As these watches were given to customers, one of whom purchased less than one hundred dollars worth of goods, it was evident that either there was a most extraordinary profit on the groceries sold, or else that the watches were "snide" affairs, and worth little or nothing from a jeweler's standpoint.

However this may be, it is quite evident that such a system of disposing of watches is not conducive to the interests of the jewelry trade, for although the timepieces may not be first-class they take the place of some better article, which should reach the public through the medium of the legitimate jeweler.

As the trade cannot prevent the sale of watches and other goods in this way, the next best thing for them to do, is to absolutely refuse to handle the goods of any manufacturer who markets them in this or any other similar fashion. The trade should firmly resolve that if any manufacturer desires to dispose of his goods by such "schemes," their business should be confined to that channel exclusively, and not allowed to use the facilities offered by the legitimate jewelry trade.

By this method such goods would soon come to be classed by the public as "snide," and suitable only for tea and coffee stores, auctions, or lottery purposes. This once effected, the sting would be taken out of the competition; they would very soon be regarded as worthless by the general public, and quickly cease to be a drawing card for such institutions.

The letter of Mr. H. R. Cuddon, of St Catharines, in this issue, shows up the dealings of at least one watch company in a very unfavorable light. Mr. Cuddon truly says that after the publication of such a letter comment is unnecessary. We give the epistle in extenso, and leave the matter in the hands of the trade, remarking only that if this or any other watch company propose to have the jewelry trade of Canada handle their goods they must at once and forever put a stop to all such "schemes" as the one they now seem to be pursuing.

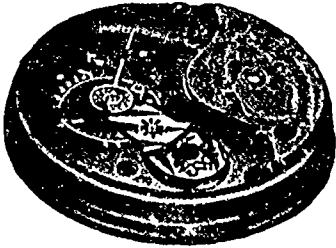
WHERE THE DIFFERENCE COMES IN.

GRREAT Britain is commonly talked of as a Free Trade country, but such is not really the case, the following imports being liable to customs duties, viz:—tea, coffee, cocoa, wines, spirits, snuff, tobacco, dried fruits, and a few other articles of minor importance. As none of these articles, with the exception of spirits, are produced in England, it is quite evident that (unless they are smuggled in) the laid down price of these goods to the English importer must be the original cost at the place of production, plus the freight and



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18 Size, Gilt.—No. 30, Hunting, or No. 90, Open Face, pendant set, 7 jewels, tempered hair spring, sunk seconds dial.



18 Size, Gilt.—No. 21, Hunting, or No. 91, Open Face, pendant set, 11 jewels, upper holes jewelled, tempered hair spring, sunk seconds dial.



18 Size, Nickel.—No. 22, Hunting, or No. 92, Open Face, pendant set, 11 jewels, upper holes jewelled, tempered hair spring, patent regulator, sunk seconds dial.



18 Size Gilt.—No. 32, Hunting, or No. 93, Open Face, pendant set, 15 jewels in settings, Breguet hair spring, patent regulator, sunk seconds dial.



18 Size, Nickel.—No. 33, Hunting, or No. 94, Open Face, pendant set, 15 jewels in settings, Breguet hair spring, patent regulator, sunk seconds dial.



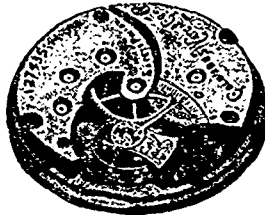
18 Size, Gilt.—No. 41, Hunting, or No. 81, Open Face, pendant set, 11 jewels, upper holes jewelled, tempered hair spring, sunk seconds dial.



18 Size, Nickel.—No. 43, Hunting, or No. 83, Open Face, pendant set, 11 jewels, upper holes jewelled, tempered hair spring, patent regulator, sunk seconds dial.



18 Size, Nickel.—No. 46, Hunting, or No. 86, Open Face, pendant set, 15 jewels, adjusted, Breguet hair spring, patent regulator, double sunk dial, jewels in red gold settings.



6 Size, Gilt.—No. 51, 11 jewels, 4 upper holes jewelled, tempered hair spring, sunk seconds dial.

Also No. 50, 6 Size, 7 jewels, tempered hair spring, sunk seconds dial.



6 Size, Nickel.—No. 55, 15 jewels, adjusted, jewels set in red gold settings, tempered hair spring, sunk seconds dial.



18 Size, Nickel.—No. 31, Hunting, or No. 85, Open Face, pendant set, 15 jewels, adjusted, jewels set in gold, Breguet hair spring, sunk seconds dial.



18 Size, Nickel.—No. 27, Hunting, or No. 97, Open Face, pendant set, 16 jewels, adjusted, extra centre jewels, Breguet hair spring, patent regulator, double sunk dial, jewels set in red gold settings.

Also

18 Size, Nickel.—No. 29, Hunting, or No. 98, Open Face, pendant set, 16 jewels, adjusted, jewels set in red gold settings, extra centre jewels, Breguet hair spring, double sunk dial, patent regulator, damasked in gold and nickel.



18 Size, Nickel.—No. 18, Hunting, or No. 99, Open Face, pendant set, 16 jewels, adjusted to position, isochronism and temperature, finest rubies set in raised gold settings, extra large ruby centre jewel, Breguet hair spring, double sunk dial, patent regulator, damasked in gold and nickel.



18 Size, Nickel.—No. 47, Hunting, or No. 87, Open Face, pendant set, 15 jewels, adjusted extra centre jewel, Breguet hair spring, patent regulator and sunk dial, jewels in gold settings.

FOR SALE BY
H. ELLIS,
14 WELLINGTON ST. W., TORONTO,
IMPORTER OF
WATCHES, JEWELRY
WATCH & CLOCK MATERIALS, TOOLS, &c.

A FULL STOCK OF COLUMBUS MOVEMENTS
CONSTANTLY ON HAND.



also the duty collected by the government. The amount collected from this source for the year ending March 31st, 1889, was £19,971,191 or nearly \$100,000,000.

In addition to this there was the same year raised from "Excise," that is duties levied upon domestic manufactures of spirits, beer, coffee and chicory, and also from licenses and railway passengers, etc., the sum of £25,474,403, equal to \$127,000,000 of our money.

This was further supplemented by another direct tax known as "Stamp" duties, which are levied upon all documents such as receipts, drafts, probates, legacies, insurance policies, bills of exchange, etc., and amounted that year to the sum of £12,210,954 or \$61,000,000. For the year above mentioned the revenue of Great Britain derived mainly from the sources already enumerated, aggregated the immense sum of £89,802,254, equal in round number to about \$450,000,000 of our money. As the total population of the British Islands is only about 37,500,000, this means an average tax of nearly \$12 for every man woman and child in that country.

It will be readily seen from the foregoing that as this enormous tax is levied entirely upon imported articles which Great Britain does not produce, or by direct taxation upon domestic manufactures, or the necessities of life, that such a system must place the inhabitants of that so-called "free trade" country at a great disadvantage as compared with people who live in "protected" countries. They apparently enjoy the maximum of taxation, without any compensation whatever in the way of protection against foreign competition.

In this connection a very quaint remark made by the Hon. Mr. Goschen, Chancellor of the English Exchequer, in his budget speech last month, shows up very clearly the absurdity of this system of taxation. After commenting upon the fact that the gross revenue from alcoholic beverages for the past year was £29,265,000, Mr. Goschen said (the italics only are ours) that "these figures showed a universal rush to the beer barrel, the spirit bottle and the wine decanter. Everybody seemed bent on toasting a national prosperity and increasing the revenue. It was a circumstance that must be deplored. A close examination would not diminish the surprise, for the largest increase had been—of all the spirits in the world—from rum, (laughter). The rum was drunk mainly at seaports. In 1888 the number of drams taken reached 255,000,000, in 1889, 275,000,000. It was an extraordinary historical fact that in the years 1875 and 1876, the greatest drinking years recorded, there was precisely the same rush and precisely the same proportion of revenue from different spirits. Increased prosperity therefore meant a great increase in the consumption of alcoholic drinks. The tipplers who had largely produced the surplus would have a chance to redeem themselves owing to reduction of the tea duty by two-pence per pound. *He opposed the abolition of the tea duty, because it was the only vehicle whereby a non-smoker and non-drinker could contribute to the revenue.*"

While this statement may seem correct from the standpoint of British free traders, it sounds almost absurd to people living on this continent, who have learned that taxation can be regulated so as not only to bear equally on every citizen in proportion to the amount of foreign goods he consumes, but at the same time to afford a measure of protection, and therefore of benefit to the industries of his own country.

In contradistinction to the British method of taxation, let us bring forward a few facts regarding the way in which the people of Canada are taxed in order to carry on the affairs of the country.

As is now well known, the policy of the Canadian government is a protective one, that is they aim to levy a high rate of duty on all goods imported into the country which can compete with home industries, while on the other hand they admit free of duty all raw material required by our manufacturers which cannot be produced by our own people.

The population of Canada is about 5,200,000 and the total revenue last year amounted to a little over \$37,000,000, or an average of \$7.24 for every man, woman and child in the Dominion.

A careful investigation of the items from which our duties are collected will reveal the fact that they are in the main levied upon tobacco, spirits, and goods of foreign manufacture which enter into competition with those produced by our home manufacturers.

While in both Great Britain and Canada the amount collected exclusively from foreign imports amounts to about \$3.00 per capita of the entire population, there is, however, this remarkable difference in the result effected:

The English duties are mainly levied on such articles as tea, coffee, spirits, wines and tobacco, none of which with the exception of spirits can be produced in Great Britain, and the collection of revenue on which can only enhance the cost without benefiting in anyway whatever any home industry.

The duties levied by the Canadian government, on the contrary, have not only brought many new and valuable industries into existence in this country, but have largely aided in placing those we already had on a solid basis by protecting them from the unfair and often ruinous foreign competition to which they were formerly subjected.

It is no wonder then that in discussing the subject of "Free Trade Taxation," the *Canadian Manufacturer* in an able editorial says:—"In free trade Britain out of nearly \$100,000,000 collected from customs duties, over \$71,000,000 are collected from duties on tea, coffee, tobacco and dried fruits—articles that the poor man must have, while the fancy wines that only the nobility, aristocrats and nabobs can drink, paid a duty of only \$6,000,000. In Britain, every man who buys a railroad ticket pays an excise tax to the government, and over \$60,000,000 was paid in stamp duties, which means that every paper having any commercial value whatever was heavily taxed. These things are not so in Canada, nor can they ever be so as long as our National Policy prevails. The average per capita tax in England for supporting the much vaunted Free Trade Policy amounts to \$11.65, while the per capita tax in Canada under Protection amounts to only \$7.24."

In the face of such facts, which are accessible to every citizen who desires to know the truth, it seems strange that any, let alone so many, of our politicians can have the assurance to assert that Canadians are the most grievously taxed people on the face of the earth, and that our protective policy, which every unbiased observer must admit has greatly benefited the country, will, if persisted in, plunge us into national bankruptcy.



SIMPSON, HALL, MILLER & CO.,

—MANUFACTURERS OF—

← **Artistic and Useful Hollow Ware.** →

Our Hollow Ware is heavily Electro-Plated upon Fine Hard White Metal, and 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.



Every Piece is Stamped Thus

TRADE MARK FOR



HOLLOW WARE.

All our Flat-Ware bears this TradeMark.

TRADE MARK FOR



KNIVES, FORKS, SPOONS.

And is Fully Guaranteed.

OUR 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 1883.)

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

CORRESPONDENCE.

CERTAINLY.

Editor TRADER—Sir :

HAVING opened up a jewelry store in this mining town, I would be pleased to receive a copy of your valuable journal.

Yours truly,

L. N. McEWEN.

Lethbridge, N.W.T., April 15th, 1900.

WE HAVE PUT YOU ON THE LIST.

Editor TRADER—Sir :

HAVING recently started in business, and as we have had the privilege of reading THE TRADER sent to our employer, we would be pleased to receive a copy of your valuable journal in future.

Truly yours,

Flesherton, March 31st, '90.

ARMSTRONG BROS.

IT GIVES THE NEWS FROM HOME.

Editor TRADER—Sir :

ENCLOSED please find my card. I would be obliged to you if you would kindly send THE TRADER to me, as it gives me all the news from home, as it were. I was formerly with E. C. Jackson, of 336 Queen St. East, Toronto, and H. R. Cuddon, of St. Catharines.

I am, yours etc.,

E. FLETCHER LIEDY,

Buffalo, N.Y., U.S., 4-23-'90.

Of Liedy Bros., Jewelers.

STOLEN! LOOK OUT FOR IT.

Editor TRADER—Sir :

WILL you please publish in your next issue a description of the undermentioned watch. As you are aware, I have been laid up nine weeks with la grippe and bronchitis, and whilst I was ill some thief came into my store and took a customer's watch off the board. Stolen during the month of March an O. F. Elgin watch, P. set, with 24 hour dial, in silver screw back and bezel case, manufactured by American Watch Case Company, of Toronto. Number of movement 3,113,360. By publishing the above you will oblige.

Yours respectfully,

Aurora, April 14th, 1890.

B. RICHARDSON

HOW IT IS DONE.

Editor TRADER—Sir :

ENCLOSED please find letter from wholesale watch factory showing an instance of the faith kept to the retail trade. The enclosed was handed to me by a gentleman in the stove and hardware trade. The other circulars speak for themselves. A regular discount and price list accompanies them. Comment unnecessary.

Yours truly,

H. R. CUDDON.

St. CATHARINES, April 19, 1890.

The letter enclosed reads as follows :

NEW YORK, April 12, 1890.

GENTLEMEN,—We take the liberty of sending you our catalogue for 1890. Our sweep-second and stop second watches are manufactured by no other company, and are fully protected by letters patent.

They are used most successfully for *scheme* purposes with cigars, spices, &c., by such houses as Thompson, Bradshaw & Co., Toronto; Ellis & Keighley, Toronto; Todhunter, Mitchell & Co., Toronto; J. J. Duffy & Co., Montreal; Bourgeau & Herron, Montreal; T. B. Escott & Co., London, Ont.; W. H. Gillard & Co., Hamilton, Ont., and a great many others, also the largest houses in the United States

We would especially call your attention to our gold filled engraved watches which we are supplying these houses with in large quantities. We would be pleased to submit samples and quote special discounts to you, if you are using or contemplate using watches.

Trusting this will receive your careful consideration, we remain,

Yours very truly,

MANHATTAN WATCH COMPANY.

ENGLISHMAN ON A SCHOOL OF HOROLOGY.

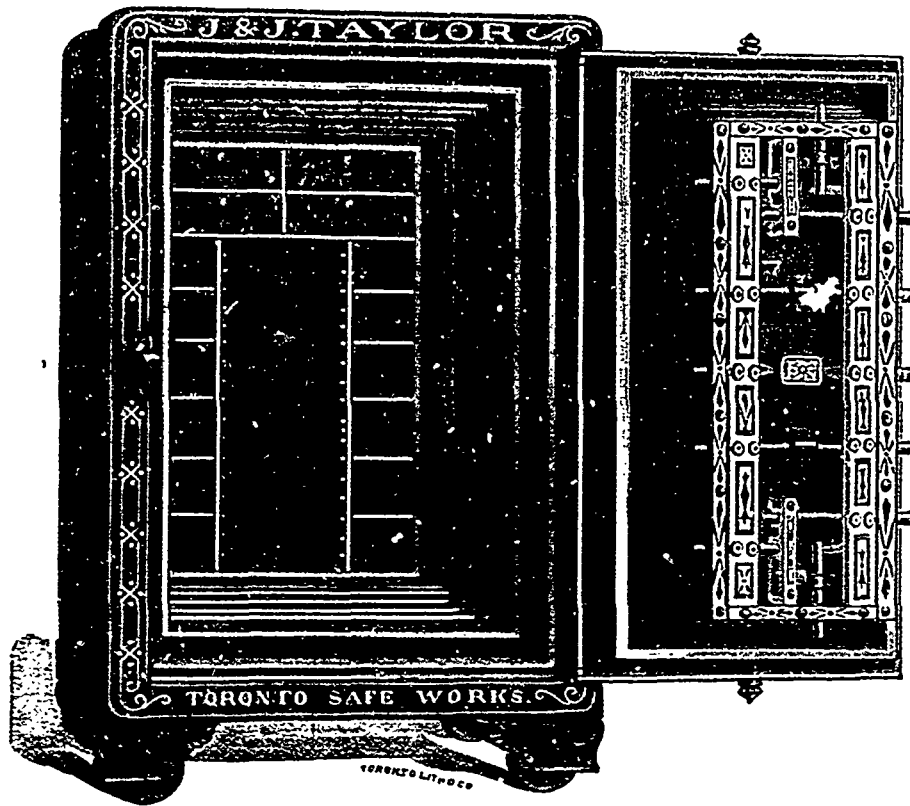
Editor TRADER—Sir :

A GREAT deal has been written lately re the botch. My opinion is they are a necessity to the trade, or at least have been, and if they have served their purpose it is well. I see a good many of your correspondents are beginning to awaken to the necessity of a Horological School, a matter that you will, I have no doubt, remember was advocated by the writer some years since in your columns. It is a matter that should interest every man in the trade, and, in fact, every true Canadian. I, sir, am looking forward to the time when it will be in our power to say that we have a school second to none on this continent; also that we have a watch and clock factory, too, equal to, if not surpassing, the best in America. I don't see why, with our increasing population and magnificent country, we should have to depend upon our neighbors to manufacture for us. Some will say that we have not the trade to support them. The same was said a few years



SOMETHING NEW IN JEWELERS' SAFES

J. & J. TAYLOR'S
NEW STYLE
JEWELERS' SAFE,



DOUBLE TONGUE AND GROOVE
FIRE-PROOF DOORS.
WITH

J. & J. TAYLOR, TORONTO SAFE WORKS.

IN ORDER to meet the wishes of the jewelry trade, we have at last succeeded in perfecting a new style of safe for jewelers' use, combining the advantages of first-class

FIRE AND BURGLAR PROOF SECURITY WITH MODERATE COST.

THE above cut represents our new style of Fire and Burglar Proof Safe for Jewelers, which has an entire lining inside of best five ply welded Chrome steel and iron, with heavy Burglar Proof door, made any thickness required, and which is securely attached to the Fire proof door. The Burglar Proof Door is fitted with rubber tube packing to prevent the use of explosives, and is locked with four wheel Combination Lock having our patent Enlarged Centre Lock Spindle and Bolt Handle.

To the above improvements is also added our new patent

DOUBLE TONGUE AND GROOVE FIRE-PROOF DOORS

this being the latest improvement in Fire Proof Safes, and PATENTED BY US JANUARY 24TH, 1886. This door is fitted with a TONGUE made of wrought iron, corresponding with and locking into a GROOVE, made of same material, on the door frame. To both of these is connected a SECOND TONGUE and GROOVE made of thin galvanized steel, which is filled with non-conducting material thus making

TWO COMPLETE TONGUES AND TWO GROOVES IN EACH DOOR.

and which we maintain is the best fire-proof safe now made.

CATALOGUES AND PRICES ON APPLICATION.

J. & J. TAYLOR,
TORONTO SAFE WORKS,
117 and 119 Front St. East, Toronto.



since *re* the watch case trade. What is the result of the persevering effort of those who were the pioneers of the trade? It is now an assured success. And such would be the reward of the clock and watch factory, if the wholesale and retail dealers would combine to support home trade, is the opinion of another

ENGLISHMAN.

AN HISTORIC TIMEPIECE.

Editor TRADER—SIR :

I HEREWITH send you a description of an old clock I have in for repairs, owned by the Rev P. Addison, and made by John Whitfield, England.

It is a thirty-hour clock, with the day of the month registered on the dial. There is but one hand attached, which points to the hours on a circle which has been silver plated. The hours are engraved pretty deep in the plate and enameled. On the inner circle the hours are divided into quarters. The dial plate is a piece of heavy plate brass, square in shape, with embossed work on each corner. The movement is in a good state of preservation, with the exception of a couple of pivot holes that required bushing, and is now performing well. The *time* and *strike* are run by the same weight on an endless chain. Perhaps some of your readers may be able to give some information as to the age of it.

It is supposed by Mr A to be about 260 years old. If so, what changes has the old clock come through? It was marking time when Charles was beheaded, and told the hours of the Commonwealth under Oliver Cromwell. When Charles II. was in the *Oak*, the old clock was quite young, and when the battle of the *Boyne* was fought had only just attained its majority. If the calculations regarding the age are correct, it has marked the time through no less than eleven reigns and the two protectorates, and I have no doubt is good for another hundred years.

If you think the above would interest your readers, and they would be likely to throw any light as regards the age of the old clock, you will oblige by inserting the same.

Yours truly,

Aurora, April 3rd, 1890.

RETAILER.

"HEP." PHILOSOPHISES.

Editor TRADER—SIR :

W deal successfully with the "botch" question, we must first locate as definitely as possible the causes, then apply the best remedy at our command, governing ourselves according to circumstances, and using our reason to determine where our efforts would produce the best general results. Perpetual fault finding does very little for humanity, but an attempt to remedy will be appreciated by all in possession of brains and ambition. I am satisfied that the general conclusion arrived at during this discussion is correct, viz : that the lack of education is one of the great causes of botchery, and, I might add, that many of the other causes hinge on it to such an extent

that a remedy for the one cause would so materially affect the others that our efforts might be reasonably concentrated for the present to that one remedy. The good results of education cannot be correctly summed up at the doors of the school. An educated man loves humanity, and is willing at all times and in any place to assist the ignorant by imparting to him all the knowledge he is prepared to use. An element like ambition will beget its own kind. Contact with ambitious people is apt to fire the slowly dying embers of its kind in the man who is almost disheartened, and it in turn might change that man's course from the straight path leading to Mr. Beeton's well described "irreclaimable" to that of a useful workman. We could go on indefinitely figuring the possibilities of many of our grievances being overcome or influenced in a great measure by a proper system of education open for those ambitious enough to gain it.

I was pleased with Mr. Beeton's outline of a "Practical Technical School," and trust that the next time we hear from him, he will see his way clear to operate the scheme. I will only touch on one item of his letter, the just distribution of awards. His estimate of its importance is undoubtedly correct. If the authority for granting such diplomas be of high enough character, the school would only then require an able staff of teachers in order to make it the leading school of its kind. I know nothing of the methods adopted by American schools already existing, but if (after the fashion of the popular Ladies' College) they "saw off" one blockhead against another to decide their relative accomplishments, and grant diplomas accordingly, we have only to follow their example in order to fail in our efforts to deal successfully with the botch question.

I think it would be well for those financially interested in such schools to relieve themselves as far as possible from the responsibility of fixing awards. If the leading watch factories of America may be considered the highest authority obtainable, and their experts the best judges of work, I have no doubt that they would feel interested enough in the matter to exert themselves in any way desired. They could give the matter proper consideration, and formulate a standard high enough for all time to come, and afterward allow their experts to rate the specimens of work for examination according to their adopted standard. This would leave the promoters of such institutions free to adopt their own methods for financial success without endangering the great question at issue.

Yours truly,

St. Thomas, Ont., April 13th, 1890. C. H. HEPINSTALL.

A NEW IDEA.

Editor TRADER—SIR :

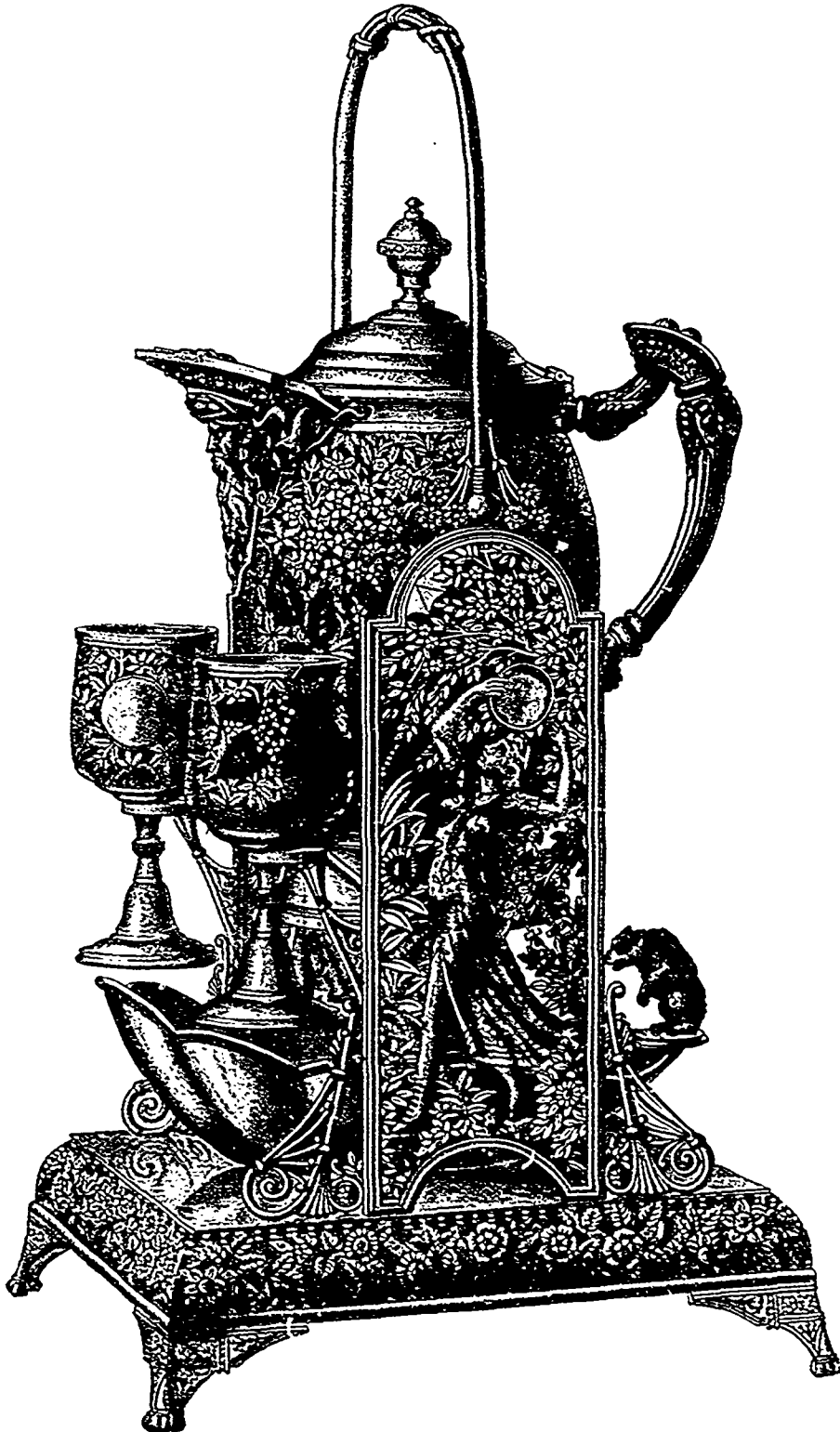
WE again rise to the surface. Since January we have enjoyed reading the many interesting letters and articles on the "Botch" question, and after careful consideration of the subject so ably laid before us by yourself and others, our thoughts are as follows :

You will remember that in our January letter we spoke of legislation. We are glad we did mention it; yet we hardly agree with "English Watchmaker" and his coercive measure. It reminds us of a communication that was discussed



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MR. BILLINGS APPEALS TO THE TRADE.

by that valuable institution, "The Horological Club," of New York. The subject agitating our "cousins" at that time was the same as is before us at present. The writer's remedy was to appoint a committee of five hundred, provide each one with a good stout hickory stick, and let them loose on the botches. Neither of these measures would work. We could not legislate, nor would the shillalah be effectual. Still, we are one with the spirit of both. When we have work before us over which we might readily think "the angels weep," is it not enough to suggest legislation, shillalahs, or any other means to clean out the perpetrators.



Editor TRADER—SIR :

A PERUSAL of your April number clearly demonstrates the fact that the trade has at least been partially aroused on the "botch" question. Of all the remedies suggested, two only seem practical, and the question must be settled in the usual way by the rule of the majority, and the greatest good to the greatest number.

Now, shall we have an horological school or an association, or both; for of course both or possible, perhaps, and one would not antagonize the other. In starting and maintaining an horological school, it is generally admitted that Government aid is necessary, but on what ground financial aid is to be requested no one suggests. If the manufacture of watches was of national importance, Government aid might reasonably be expected; but, as the matter stands, the watch repairer is on the same basis as any other mechanic. No, gentlemen, don't waste any time or energy in the vain attempt to obtain Government assistance.

Mr. Beeton and his intimate friend, Mr. Playtner, warmly advocate such an institution, but I cannot see how such a project can succeed in the face of all the difficulties to be overcome at the present time. In the first place will the number of jewelers in Canada warrant such a proceeding? Look them over carefully, see what they are worth, how many or what percentage of them employ men, do their own work, or are botches; also, how many of the remaining few *could* attend, even if they so desired. Then, see the vast territory over which the anxious ones are scattered. Think it over well, and if any one can be found who is willing to furnish the "several" thousand dollars required for tools, machinery, etc., also to guarantee salaries to professional talent, which, beyond all doubt, will have to be imported, all very well. It will be a very hard struggle, and an ultimate and signal failure.

An horological school would be of great benefit, and would accomplish much, I am willing to admit, and I would do all I could to favor it, but I cannot see how it could be conducted on a paying basis, nor can I see in what manner it will act in the betterment of the botch. It costs considerable money to attend an horological school, and considerable more to purchase the tools to do the work one has been taught, and as we all know the botch is generally poor and works with his "fingers," and has, as a rule, evinced supreme contempt for the man who possesses a fine complement of tools.

What the trade requires, in fact demands, is *immediate* relief, complete if possible, partial at least. The Canadian Practical Watchmaker's Association seems to afford that relief in the most speedy and complete manner, and aside from that it grants a diploma to a competent workman who would have no occasion to attend an horological school. The possessor of a C. P. W. A. diploma would be able to show by his workmanship that he was entitled to it, and the business use of it in a business way would accomplish much in reducing the great number of botches.

I do not propose to drive any man out of the business, or to advocate bitter measures against anybody or class, but simply to place in the hands of the competent workmen a

However, as has been said, we have the botch with us to stay. He *will* stay, and *won't* be educated. So let us shew that we are anxious to have an institution in our midst where those who *do* wish to improve can receive instruction in any branch of our art.

We believe with you that the time has come when a good horological school should be established in our midst; and we further believe, if entered upon by a man (or men) of the right metal, that financially the undertaking would be successful. But, as we hinted in January, there would have to be great care taken to keep up a first-class standard, as on that very thing we believe depends the ultimate success or non-success of the institution. And just here is where there is a danger of weakness in all such schools. The idea of the founder is not philanthropy; it is hard cash he is after, and seems to me the temptation to do "funny work" must at times try even the best of teachers.

There is one side of this question which has not been discussed, and which is suggested by the reference in your April editorial to the enlightening of public opinion *re* the botches. Why not organize ourselves into a Literary Society, each or as many as will, contributing original or copied articles treating on the watch, its peculiarities, the way to use it, its many troubles, etc., showing forth among other things the economy of good care, the fallacy of trusting such an intricate piece of machinery to every Tom, Dick, or Harry, who dubs himself "watchmaker," etc. Of course the articles would need to be as much as possible free from technicalities, not rancid, but reasonable and entertaining. They could be submitted to a chosen committee, and if we would each interest ourselves there should be little difficulty in having an occasional article appear in our own local paper. Your valuable journal would be a good starting point from which the articles could be culled as required.

In the articles there would need to be nothing savoring of advertising any particular watchmaker—no personalities; nor would any workman be benefited by using such in his own name. The suspecting public would catch on to this strain at once. "Oh! merely another trick, it's money he's after." The botch would also use it and pose as "the poor man's friend."

This course running in conjunction with a good horological school, from which a diploma would be as "good as gold," would, we believe, in very few years make the botch so sick that he would be obliged to leave our fair Dominion for pastures more *green*.

Trusting that the ball will roll till a good level is reached,

I am, yours, etc.,

ALEX. MOFFAT.

Port Elgin, April 17th, 1890.

[The columns of THE TRADER are always open to such articles as Brother Moffat suggests, and our jewelers can carry out his idea *at once*, by sending in their communications to us. ED. TRADER.]



ASK OUR TRAVELLERS TO SHOW YOU

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diploma to prove to those interested that the holder has passed a satisfactory examination on the subject and is competent and understands what he claims in regard to watch repairing. That is all a physician can generally show, a diploma, and why is not one as good as the other? It is as near the right thing as we can get, and we must make the best of it. An horological school grants diplomas to those who can buy them by losing much time and money, and many workmen who have been taught the rudiments of the trade and afterwards perfected themselves by the study of Saunier, Grosseman and Excelsior's works, must do without, or go and learn what they already know in order to obtain a diploma.

An association diploma or certificate can be granted for not more than the mere printing would cost, and the applicant could produce specimen work or undergo an examination at his leisure.

Now, readers, what shall it be? Shall the watch repairers have an association? There are three beside myself who are in favor of such an association, but we should have at least three hundred to start with.

Do not, after reading this over, mentally resolve to take action to-morrow, or bye and bye, but act at once, do something which will improve your business, or, if you are not a watch repairer, call the attention of your watch repairer to this appeal and persuade him to take some action in the matter. Simply write the one word "Association" on a card if nothing more, and direct it to

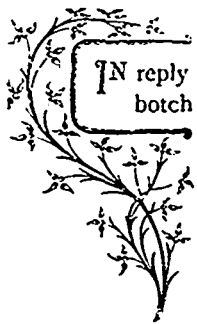
C. E. BILLINGS,

April 21, 1890.

208 Dundas street, London, Ont.

MR. KLINCK HAS THE FLOOR.

Editor TRADER—Sir :



IN reply to the question, "What shall we do with the botch?" and the working of a good horological school in connection therewith, I will venture to make a few suggestions.

That a great proportion of the watchmakers now in the trade are sorely in need of technical education is a fact which everyone who understands his business will admit. Whatever may be the causes of this condition—and some of them have been well described by your correspondents in the late issues of the TRADER—it is certain that there is a general resentment against, and a desire to get rid of the botch, the annoyance he causes, and the reflection he casts on those who are competent and honest enough to do their work properly. If this could be done, a blessing would be conferred upon the trade in particular and the public in general. But, just what to do, and how to do it, in order to arrive at this end, is a problem not so easily solved.

No plan that I can think of, or that has been proposed by your correspondents, is free from great difficulties which would be hard to overcome. I have little sympathy with the proposition of compelling everyone to pass a certain examination, and to hold a certificate of competency before he should be

allowed to commence repairing on his own account, simply because I deem it impracticable. If such a thing could be done—if the Government could be reasonably asked to interfere—there is no doubt that a great improvement in the condition of things in the trade would soon manifest itself.

It is, however, not probable that the Government will interfere, nor is it likely that anything would be done by it in aid of instituting or maintaining schools of instruction. For this reason, and because I believe that reforms of this kind can only be brought about by paying proper attention to the education of those who are lacking it, I find myself obliged to fall into line with those of your correspondents who agitate the opening of an Horological School by private enterprise, or by the co-operation of a body of persons interested in the advancement of the science and practice of horology.

In point of knowledge, a certain Arabian philosopher has divided mankind into three distinct classes, and has described and placed them at their value as follows :

1st. "He who knows not, and knows not that he knows not, is a fool.—Leave him alone."

2nd. "He who knows not, and knows that he knows not, will learn.—Teach him."

3rd. "He who knows, and knows that he knows, is a wise man.—Follow him."

Watchmakers, in this respect, do not differ from the rest of humanity. Representatives of all three classes are found amongst them, and the first class seems to be by no means the smallest. In order to do anything for the advancement of the trade, the first thing necessary would be to get enough members of the second class together to form a class which would be willing and in a position to place themselves under the instruction of a selected few of the third class.

The moment this could be done a long step in the right direction would have been taken. Then, whether the place of instruction would be a thoroughly equipped Horological College, costing thousands of dollars to institute and maintain, open to students year in and year out, or simply a lecture room, furnished with the most necessary apparatus for teaching and illustrating a theoretical and technical course of a few months duration, would depend altogether on the amount of support that would be forthcoming.

For reasons following, I believe that Horological Schools, in themselves, are inadequate to meet the demand for workmen in this country. The mechanical and commercial interests of the retail watch and jewelry trade are so inseparably connected—one so dependent on the other—that a workman, educated in the former branch alone—a graduate of an Horological College, if you like—would meet with great difficulty in building up a trade of his own, or in doing justice to that of his employer, especially if he were obliged to compete with one who was well up in both branches.

What I mean is this: All the information necessary to make a thorough retail watchmaker and jeweler, or a valuable assistant to one, cannot be obtained at a college. A certain amount of knowledge of human nature, as well as an ability to occasionally leave strictly methodical ways and to adapt oneself to conditions as they exist, are indispensable. The proper place for a man to obtain a proficiency in this respect is right in

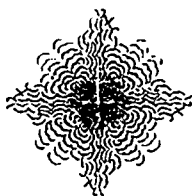


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MANUFACTURERS

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Montreal, May 1st 1890

Dear Sir,

Carefully compare our "B" chains with anything offered to you, and you will find Finish, Quality and Price on the side of the "B" chains every time. Testimonials to this fact from the best retail Jewellers in Canada are coming in daily.

Yours truly,

Bolt & Co.

(See back of page.)

We claim for our B chains

PERFECTION

and will fully guarantee the Quality of every chain made by us.

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Bolt Co.

Manufacturers of

Fine Rolled Plate Chains.



Lack of space in our letter form prevents our making a few remarks in this month's issue of the "Trader," which we may as well do here, relative to the Rolled Plate Chains manufactured by us.

We have made several claims for them on the score of quality and finish which by the retail trade that have handled them, have been fully endorsed. Amongst such retailers who have written us high testimonials as to the merits of our manufacture, we have the names of many practical men, in good standing, who have made careful tests and comparisons. Satisfied that we are offering an article which will compare most favorably with the best American made goods, we feel that we deserve the hearty support of the trade as we have established at great expense a new industry in Canada, and spared no pains to produce a bona fide first class article which can only reflect credit to the man who sells it to the public. If you really desire to encourage home manufacture, and at the same time study your own interest by buying as good a rolled plate chain as can be produced, ask the house you deal with for the "B" Rolled Plate Chain and don't be persuaded to buy any other.

Yours truly,

Bolt Co.

Montreal, 1st May, 1870.



the retail store or repairing shop, where he constantly comes into contact with those whom he is expected to serve.

On the other hand, one who is never taught the reasons—the whys and wherefores—for doing the work he is called upon to do, is necessarily working in the dark, and there will be no end to the errors he will fall into, and the amount of unnecessary work he will be doomed to do, not to say anything of the positive harm and destruction of property which will be chargeable to his account.

By taking a course of theoretical instruction, and some practice at an horological school, the latter difficulty could be overcome, and by serving an apprenticeship with a watchmaker, the other information could be acquired.

What we want is an horological school of some kind, to be made use of, not as the only means by which watchmakers could be turned out, but rather as a help to the old system of apprenticeship. A great help such an institution would be. If proprietors of repairing shops and journeymen could only be convinced of the benefits of a course at such an institution, there would be no difficulty in getting up a class, composed of these alone, sufficiently large to commence operations at once.

Colleges of Horology are expensive commodities, and it might be some time before one, fully equipped, could be set up in Canada. Nevertheless, while this was being done, instruction in the primary courses could be gone on with. In the countries where these colleges originated, they were instituted for the purpose of fitting up workmen for the higher positions in the watch factories. They have done an immense amount of good in advancing the manufacture and improvement of time-pieces.

The manufacture of watches has, of late years, undergone great changes, so that now, by the employment of automatic machinery, a few master minds control the operations of hundreds of workmen where, formerly, perhaps twenty times the number of theoretically and practically trained men were necessary to do so. Consequently the schools have suffered considerably, but they are still very successful in furthering their purpose. Students in the Swiss schools, as a rule, must take a course of at least three years under theoretical and practical instruction, and are, when they graduate, supposed to be qualified to enter upon their career as watch finishers or adjusters. The object of these schools is not to turn out retail watch repairers; nevertheless, schools instituted for that purpose should give a good deal of the same kind of training.

A shorter course, augmented by considerable practice at a repairer's bench would, it seems to me, answer the purpose very well. Whatever is to be done in the way of training, should be done under the auspices of a representative body or association. The course might be divided into several grades, and certificates given accordingly, but not unless or before a certain corresponding term had been spent in actual practice in a repair shop. Thus, grade 1 has passed in certain subjects, and has worked at the trade a certain time. Grade 2 has passed in an additional number of subjects, and has spent an additional space of time in actual practice. Grade 3 has passed in all the subjects, and is therefore a graduate, entitled to a diploma, provided he has spent the required time in practice.

I realize the difficulty students, especially apprentices

already placed, would encounter in getting to school at the proper time. However, one branch would help the other. For instance, if the college course, or part of it, were taken before working at the bench, the knowledge obtained there would help the bench work. If it were taken during the latter part, or at the end of the required practice time, the practice, though imperfect, would help the college course. In either case, if the student passed the examinations, he would be a thorough and practical watchmaker as we understand the term in this country.

This plan would also guard against the overproduction of workmen. For the sake of economy, and for other reasons, watchmakers would not stop taking apprentices, even if a school of horology were instituted. About the usual number would be employed, and if the schools were carried on independently of time spent at the bench—if nothing were required of the students but to pass the course in order to place them in the field as journeymen—as is the case in the U. S.—there would soon be a double supply of workmen. Here in Canada we do not suffer for want of workmen. What we want is not more but better workmen.

If a school of horology should be started in Canada, as I hope there will be, its course of instruction should of course partake of the nature of those of other horological schools, and should be set at the discrimination of a board of directors elected for the purpose. As I have already taken up too much space, I will not attempt to describe such a course in detail, but will close my letter, submitting my suggestions to the trade, hoping that they may be instrumental in bringing about an association for the advancement of horology, which will be in a position to deal with the "botch" question in a practical way.

Respectfully yours,

Elmira, Ont., April 17, 1890.

GEO. KLINCK.

MODERN WATCH REPAIRING IN A MODERN WORKSHOP.

BY E. BEETON, TORONTO.

WHEEL AND PINION CUTTING.

J. M. P. writes asking me to describe the "Modus Operandi" of wheel and pinion cutting on the American lathe, and the probable cost of the attachments necessary to do all kinds of cutting.

The wheel and pinion cutting fixture is operated in connection with the slide rest, and is attached to it by removing the tool post and fastening in its place the frame of the fixture, by means of a large screw. The fixture has a vertical spindle which carries the cutter, and can be raised or lowered to the centre of the work. This spindle has a small pulley at the top, which is connected by a fine belt, with a four inch pulley attached to the countershaft. Thus an immense speed for the cutter is obtained, viz., about 50 revolutions of the cutter for every revolution of the foot wheel. The work or wheel to be cut is attached by means of a screw, lathe cement or soft solder, according to circumstances, to one of the lathe chucks. An index wheel fits accurately over the draw in spindle, and



Looking Backward,

in 1909, the Trade will appreciate, more than ever, the mutual advantage of having handled first class Gold Filled Watch Cases

It is one thing to guarantee Cases for a score of years; it is another thing to manufacture only such goods as render recourse to this guarantee unnecessary

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is held friction tight between the shoulder of draw in spindle and the head stock spindle. What is termed a latch is attached to the bed of the lathe, and at its upper end has a tongue, which catches in the notches in the index.

The last wheel I cut on my lathe was a star wheel, having thirty-one teeth, for denoting the date of the month in a calendar watch, and I might as well describe the making of it as any other. I first turned up a brass wheel blank of the requisite diameter and drilled a small hole through the centre. I then put a $\frac{1}{4}$ inch cement brass in screw chuck, and turned a pivot or bearing down the end of cement chuck, to fit my wheel blank on. I then attached the blank to it with lathe cement, pressing the blank firmly against the square shoulder of the cement brass, and noting that it was revolving truly. I then slipped an index, having on its circumference 62 notches or divisions, over the draw in spindle, and attached the latch to the lathe bed, parallel with the index; then removed the belt which connects the head-stock pulley with the counter-shaft, because the work is now held stationary by the latch in connection with the index. I next fit the star cutter in its place on the vertical spindle in the fixture, and attach the fixture to the slide rest as described, and raise or lower the spindle till the cutter is on line with the centre of the wheel blank. This is done by means of a centre guide attached to the frame of the fixture. Then I fasten the slide rest in the desired position, and having attached the fine belt to the two pulleys above mentioned, I bring the cutter up against the wheel blank by means of the feed screws of the slide rest, and revolving the cutter cut a notch or space in the wheel blank, then move the index two notches and cut another space and find that the tooth is not cut to a knife edge, and so turn the cross-feed screw to cause the cutter to enter deeper into the wheel blank until the tooth is correct; then repeat the cutting operation till the entire number is cut. All wheel and pinion cutting is done on the same principle, though of course with modifications in detail, the slide rest being arranged differently, for instance, when cutting bevel stem-wind wheels than when cutting flat ones. You can get from the lathe factories indexes for cutting any number of teeth from 3 to 360, and also all kinds of cutters for cutting watch and clock wheels and pinions. As far as the teeth of wheels are concerned, they are finished when cut, but steel pinions require to be tempered and polished subsequently, and the Wig-Wag is brought into requisition to do the polishing, the operation of which I will explain in another article. It is very seldom one finds it necessary to make a pinion, but stem-wind wheels and different kinds of brass wheels are very frequently required, which it is impossible to buy in the material shops, and then the attachments for this work are indispensable. If you have the lathe and slide rest, the cost of the other attachments necessary, including a stock of cutters, indexes, etc., will be about \$60.00.

SINCE John Wanamaker became Postmaster-General of the United States he has ceased to sell roulette tables and faro lay-outs. When he started in the business of running his great bazaar he sold everything that anybody would pay for. In the department of games he kept playing cards, roulette tables, chips, bones, counters and everything else that is necessary to gamble with, including dice and dice boxes. When the bazaar became very profitable, and Mr. Wanamaker started to go into society, he gradually ceased to sell gambling implements.

PRACTICAL HINTS ON WATCH REPAIRING.

BY EXCELSIOR.

THE DUPLEX ESCAPEMENT.—CONTINUED.

(481) But there are other considerations which also govern the proportion between the diameters of the rollers and the repose-wheel. Fig. 30 shows a roller circle u , and part of a larger roller, $u'n'$, with its centre at e' , both having the same intersection ac , with the wheel circle xx . We see, first, that the larger the roller, the smaller the small-lift. The intersection is the same in each case from a to c , but the angle aec is evidently much larger than $ae'c$, the angle of small-lift of the larger roller. Second, that the larger the roller, the nearer to a straight line is the curve from a to c , and the less secure the repose or locking of the tooth at the point a . The tooth o tends to force its way past the roller, and the shallower the intersection or the nearer straight the curve from a to c , the more danger there is of the tooth springing the staff and forcing it back. Third, the larger the roller, the greater the radius of friction, and the more the pressure of the tooth will retard the vibration of the balance. The radius of the small roller is ea , while that of the larger one is $e'a$, so that the friction acts upon the end of a lever twice as long as the other, and must produce twice the retardation. The farther from the centre of a revolving shaft friction is applied, the greater its effect. Not only is this so, but with any increase in the strength of the motive power this retarding influence would also become greater. A duplex watch with a large roller, driven by a going-barrel, would be so much affected by the difference of the motive force, as the mainspring was more or less wound up, that the hair-spring would be unable to properly control the vibrations of the balance, and close regulation would be impossible.

(482) Fourth, the larger the roller, the greater the injurious influence of the friction in another way; the pressure of the tooth being now more oblique is more powerful. In addition to the actual or direct pressure of the tooth against the roller (481), there is the wedging action arising from its oblique direction. The larger the roller, the stronger this pressure, because the more oblique, and it is specially injurious during the forward vibration of the balance, because then the direction of the motion of the roller coincides with that of the pressure of the tooth, tending to draw it in and force it past the line of centres. Fifth, the larger the roller, the more injurious the recoil of the tooth during the return vibration, as it occurs at the end of a longer radius or lever. As the notch passes to the left, the tooth drops from the left lip across the notch against the right lip, giving it a blow directly opposed to its direction of motion. The balance continuing to vibrate, the right lip carries the tooth back as far as it had fallen forward, causing a recoil of the wheel against the whole pressure of the mainspring, both the blow and the recoil being more powerful as the roller is larger; even in a medium sized roller offsetting the impulse given by the tooth pressing against the lip through the small-lift. In large watches, taking mainsprings of good width and strength, larger rollers are allowable than with small thin movements, which will receive only narrow springs. When the motive force is weak, the roller should be smaller to lessen



ELGIN NATIONAL



NEW ISSUE.

B. W. RAYMOND

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PENDANT SETTING.



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NEW YORK OFFICE, 11 JOHN STREET. FACTORIES, ELGIN, ILLINOIS.

WATCH COMPANY

the friction and resistance of the tooth upon it. Accordingly, if the movement is otherwise correct, we may enlarge a scant vibration either by a smaller roller, or by keying up the main spring more when a stronger one could not be fitted.

(483) The action of a roller too small may be briefly described as the opposite of that given for rollers too large. The repose or locking of the tooth upon it is unsafe, because, although the surface is more curved, the depth of the intersection is so very minute an amount, owing to the small size of the roller, that the least play of the balance pivots in their jewel holes, any springing of the balance staff, any inequality or wear of the teeth of the wheel, any want of perfect trueness or concentricity of the roller on the staff would infallibly affect the running, either by allowing the tooth to get past the roller, or coming so near to wedging its way past as to stop the watch or greatly disturb the rate. The smaller the roller, the less the effect of the friction (both direct and oblique) of the tooth upon it, as it acts upon a shorter lever, or nearer to the centre of the roller. The balance is left more free and the vibration larger, while the control is less. The smaller the roller, the less injurious the blow and the recoil, both from the notch being correspondingly narrower, and the lip being nearer the centre.

(484) The size which practically satisfies all these varying conditions is the one which will give the desired control (476). While the other conditions may be safely modified to some extent without material injury, the function of control should be most carefully provided for. It is peculiar to this escapement, and indispensable to correct performance. With a large roller, as we have seen, the balance vibrations are diminished and greatly affected by change of the motive force. A smaller roller leaves the balance uncontrolled and its motion too free. As the impulse is very energetic during the large-lifting, acting at the best mechanical advantage, a small roller allows the vibrations to become too large, especially as the motive force becomes stronger, resulting in tripping, or allowing two teeth to pass at each vibration instead of one. Besides the small roller being defective in principle, as having too little control, there are grave practical objections to its use, as its weakness, the minuteness of the acting parts, being affected by the slightest amount of wear, inequality of construction, dirt, etc., with other objections already noted.

(485) It has been concluded that the diameter of the roller should never be smaller than $\frac{1}{4}$ the distance between two teeth, and not so small as that except in small watches with weak motive force. In large watches, taking wide and strong mainsprings, $\frac{1}{3}$ would be better adapted to the conditions. The best results in all ordinary cases are shown by experience to follow the medium between these extremes, or $\frac{2}{3}$ the distance between two teeth, which will be about 7° . The actual diameter of the roller can be calculated as follows: As every circle has 360° , a roller having a diameter equal to $\frac{1}{4}$ the distance between two teeth, or 8° , would be $\frac{4}{5}$ the circumference of a circle passing through the points of the repose teeth. Measure the diameter of the wheel, multiply by $3\frac{1}{2}$, which gives the circumference. Divide this by 45, and we have the proper diameter for a roller jewel suitable for that wheel.

(486) We may avoid the trouble of computing the circumference and dividing it by 45, by getting the equivalent pro

portion of the diameter itself. Dividing 45 by $\frac{3}{4}$ we get 14 (about), so that $\frac{1}{4}$ the diameter is equal to $\frac{1}{4}$ the circumference, and we need only measure the diameter of the wheel and divide that by 14 for the diameter of the roller. In the same way we find that $\frac{1}{3}$ the distance between two teeth is about $\frac{1}{6}$ the diameter of the wheel, $\frac{1}{2}$ is about $\frac{1}{11}$, $\frac{2}{3}$ about $\frac{1}{11}$, etc. These figures are only approximately correct, but are as near as will be got by measurement of the parts. All things considered, a roller slightly too large is preferable to the reverse, as a deficiency of motion is better than too large vibrations, which from the effects of riding, and even carrying, would result in tripping, causing double speed of the escape-wheel and the hands. We have here a hint for the correction for an improper size of roller: If the roller is too small, weaken the

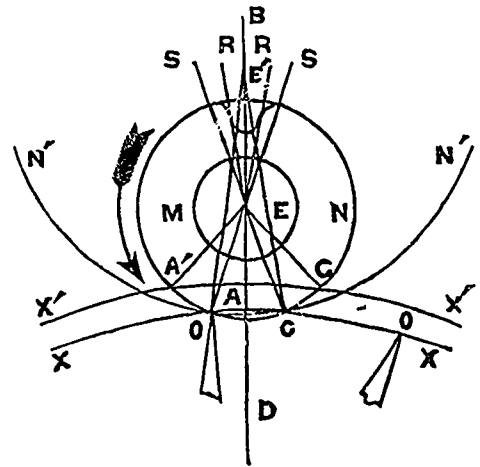


Fig. 30.

mainspring, if too large stiffen it, either by changing the spring or by altering the stop works to give a different amount of "keying-up." The workman will now perceive the necessity of care in selecting a roller jewel, and the effect of having one too large or too small, as well as how to meet any peculiarities of construction requiring special treatment adapted to them.

(487) We have now to consider the shape and width of the notch in the roller. This must not be so deep as to reach too near the central hole *m*, for this would weaken the jewel and make it unsafe. The shape of the notch should be such that the point of the tooth will be perfectly free while passing through it and wide enough at the surface of the roller to likewise clear the tooth at the proper distance from the point. It therefore depends somewhat on the shape and thickness of the teeth, and their depth in the notch. The wider the notch the further the tooth falls from the left to the right lip, and the more powerful the effect of the blow. But if it is narrow, the balance must vibrate further from the line of centres to the left to allow a repose-tooth to enter the notch, and to the right to enable it to escape, rendering the escapement more liable to set. The wider the notch, the greater the recoil of the wheel, during the return vibration of the balance, as the right lip must carry the tooth back again, and leave it locked on the outside of the roller as before, till the notch comes around by the forward vibration to receive the tooth for impulse. The width is ordinarily about 20° , measured upon the circumference of the roller from its centre, and shown by the lines *er, er*. The sides of the notch should be perfectly polished, and the two edges or lips not rounded off any more than enough to prevent sharpness. This rounding off should not occupy over 5° outside of lines *er*, or between them and the lines *es, es*. When, however, the small-lift is larger than 30° , the notch may be a little wider, being about 30° when the small-lift is 50° or more.

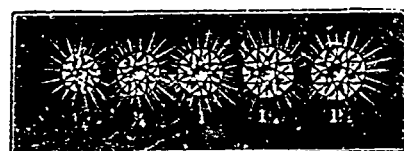
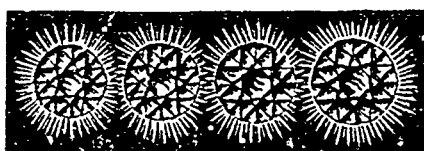
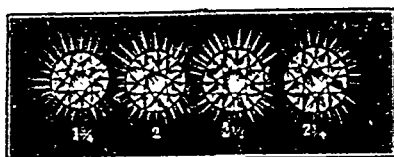


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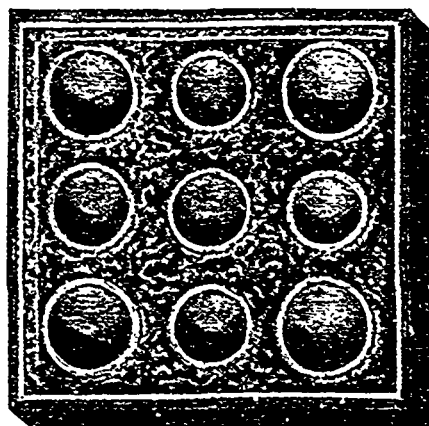
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HAVE YOU SEEN OUR PLUSH AND SILK VELVET SCROLLS? We make them for Chains, Rings, Brooches, Lockets, etc. Prices from \$3.50 up.

We also have a jaunty little SILK VELVET PIN STAND @ \$1.25. The best thing ever made for showing Scarf Pins.

Our REVOLVING COUNTER MIRRORS @ \$3.50 are limited in number, and are going fast. The Mirror is 10 inches in diameter. This is a bargain that we cannot repeat.

OUR TRAYS IN WALNUT AND PLUSH AND WALNUT AND SILK VELVET

Made up in slack times, are disappearing as fast as the snow. Every one of them is guaranteed. Stock Trays measure 11 x 11. Walnut and Plush, Plain Tray, \$1.00. Walnut and Silk Velvet, Plain Tray, \$1.25.

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SELECTED MATTER.

WHERE THE BOTCHES COME FROM!

[It is now about seventeen years since the following sketch was written by Mark Twain, and although it was published in THE TRADER years ago, it is so apropos to the present discussion. What shall we do with the botch? that we hazard printing it again, feeling sure that its quaint humor will amply repay every one of our readers for even a second perusal.—ED. TRADER.]



MY beautiful new watch had run eighteen months without losing or gaining, and without breaking any part of its machinery or stopping. I had come to believe it infallible in its judgments about the time of day, and to consider its constitution and its anatomy imperishable. But at last, one night, I let it run down. I grieved about it as if it were a recognized messenger and forerunner of calamity; but by and by I cheered up, set the watch by guess, and commanded my bodings and superstitions to depart.

Next day I stepped into the chief jewelers to set it by the exact time, and the head of the establishment took it out of my hand and proceeded to set it for me. Then he said, "she is four minutes slow—regulator wants pushing up." I tried to stop him—tried to make him understand that the watch kept perfect time. But no; all this human cabbage could see was that the watch was four minutes slow, and the regulator *must* be pushed up a little; and so, while I danced around him in anguish and besought him to let the watch alone, he calmly and cruelly did the shameful deed.

My watch began to gain. It gained faster and faster day by day. Within the week it sickened to a raging fever, and its pulse went up to a hundred and fifty in the shade. At the end of two months it had left all the timepieces of the town far in the rear, and was a fraction over thirteen days ahead of the almanac. It was away into November enjoying the snow, while the October leaves were still turning. It hurried up house rents, bills payable and such things, in such a ruinous way that I could not abide it. I took it to the watchmaker to be regulated. He asked me if I had ever had it repaired. I said no, it had never needed any repairing. He looked a look of vicious happiness and eagerly pried the watch open, then put a small dice-box into his eye and peered into its machinery. He said it wanted cleaning and oiling, besides regulating—come in a week.

After being cleaned and oiled and regulated, my watch slowed down to that degree that it ticked like a tolling bell. I began to be left by trains, I failed all appointments, I got to missing my dinner; my watch strung out three days grace to four and let me go to protest; I gradually drifted back into yesterday, then day before, then into last week, and bye and bye the comprehension came upon me that all solitary and alone

I was lingering along in week before last, and the world was out of sight. I seemed to detect in myself a sort of sneaking fellow feeling for the mummy in the museum, and a desire to swap news with him. I went to a watchmaker again. He took the watch all to pieces while I waited, and then said the barrel was "swelled." He said he could reduce it in three days.

After this the watch *averaged* well, but nothing more. For half a day it would go like the very mischief, and keep up such a barking and wheezing and whooping and sneezing and snorting, that I could not hear myself think for the disturbance; and as long as it held out, there was not a watch in the land that stood any chance against it. But the rest of the day it would keep on slowing down and fooling along until all the clocks it had left behind caught up again. So at last at the end of twenty-four hours, it would trot up to the judges' stand all right and just on time. It would show a fair and square average, and no man could say it had done more or less than its duty. But a correct average is only a mild virtue in a watch, and I took this instrument to another watchmaker. He said the kingbolt was broken. I said I was glad it was nothing more serious. To tell the plain truth I had no idea what the kingbolt was, but I did not choose to appear ignorant to a stranger.

He repaired the kingbolt, but what the watch gained in one way it lost in another. It would run awhile and then stop awhile, and then run awhile again, and so on, using its own discretion about the intervals. And every time it went off it kicked back like a musket. I padded my breast for a few days, but finally took the watch to another watchmaker. He picked it all to pieces and turned the ruin over and over under his glass; and then he said there appeared to be something the matter with the hair-trigger. He fixed it, and gave it a fresh start.

It did well now except that always at ten minutes to ten the hands would shut together like a pair of scissors, and from that time forth they would travel together. The oldest man in the world could not make head or tail of the time of day by such a watch, and so I went again to have the thing repaired. This person said that the crystal had got bent, and that the mainspring was not straight. He also remarked that part of the works needed half-soling.

He made these things all right, and then my timepiece performed unexceptionably, save that now and then, after working along quietly for nearly eight hours, everything inside would let go all of a sudden and begin to buzz like a bee, and the hands would straightway begin to spin round and round so fast that their individuality was lost completely, and they simply seemed a delicate spider's web over the face of the watch. She would reel off the next twenty-four hours in six or seven minutes, and then stop with a bang. I went with a heavy heart to one more watchmaker, and looked on while he took her to pieces. Then I prepared to cross-question him rigidly, for this thing was getting serious. The watch had cost two hundred dollars originally, and I seemed to have paid out two or three thousand for repairs.

While I waited and looked on, I presently recognized in this watchmaker an old acquaintance—a steamboat engineer of other days, and not a good engineer either. He examined all the parts carefully, just as the other watchmakers had done, and



EDMUND SCHEUER.

Everything Needed by Jewelers.

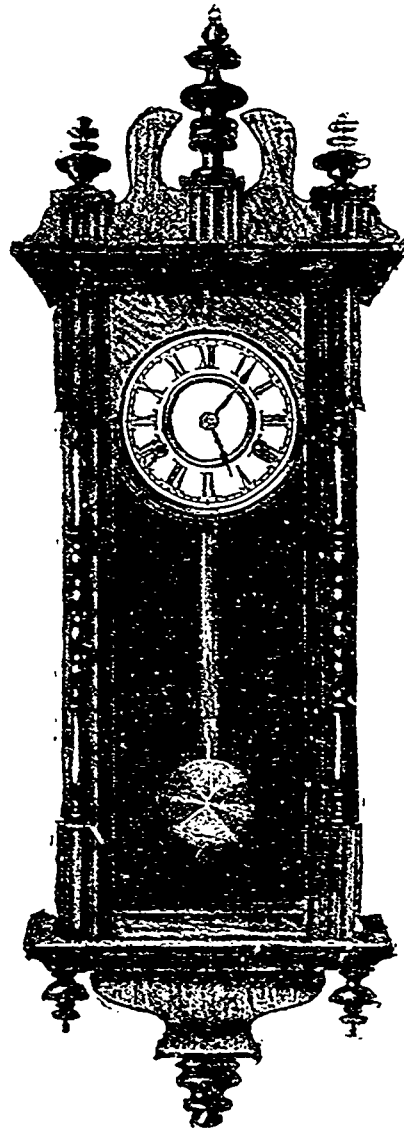
FAHY'S ^{and} BOSS

FILLED CASES CHEAPER THAN EVER.

MONTRES AMERICAINES.

HORLOGES AMERICAINES.

BAGUES
—
JUMELLES
DE
MARINE
ET
THEATRE
—
LUNETTERIE
—
BIJOUTERIE
OR
—
MACHINE
A
PLAQUER
MORRISON



BRONZES D'ART
—
OUTILS
ET
FOURNITURES
D'HORLOGERIE
—
CORDONS
DE
MONTRE
—
BIJOUTERIE
FAUSSE
—
MOUVEMENTS
LEADER
ET
PRINCESS

PENDULES FRANCAISES.

ELGIN, WALTHAM, COLUMBUS, NEW YORK STANDARD.

TORONTO.



then delivered his verdict with the same confidence of manner.

He said :—

"She makes too much steam—you want to hang the monkey-wrench on the safety-valve!"

I brained him on the spot, and had him buried at my own expense.

My uncle William (now deceased, alas!) used to say that a good horse was a good horse until it had run away once, and that a good watch was a good watch until the repairers got a chance at it. And he used to wonder what became of all the unsuccessful tinkers, and gunsmiths, and shoemakers, and blacksmiths; but nobody could ever tell him.

THE LATEST FADS AND FANCIES.

SOME of the more stylish hair pins have mother-of-pearl prongs.

Pencil cases, of late issue, are of mingled gold and mother-of-pearl.

Some of the latest silver belt buckles assume all sorts of fantastic shapes.

Coral jewelry is frequently seen, and is again attracting considerable attention.

Garnet incrusted globes are a much affected fancy in single pronged hair pin tops.

Little basket queen charms of gold, ornamented with precious stones, are more popular than ever.

A charming new brooch is a small star of colored pearl set in the centre of another star of diamonds.

Narrow corded ribbon watch-guards to correspond with the color of the waistcoat have a bar and clasp of gold set with diamonds.

Among the fanciful designs in scarf pins is a small turtle whose body is formed of a pearl and the head of a number of selected garnets.

Two narrow flat bands held together at intervals with pearls, and containing a solitaire diamond setting compose a ladies' ring now in style.

There are bracelets on the market composed of a gold wire circle with a varicolored gold frog which is pushed back and forth to open or fasten the bracelet.

Lilies of the valley seem to be a popular model for the handles of spoons. The shape of the leaf is copied in the form, and on this is the stock of the flower in relief which makes the decoration.

Diamond necklaces are in great vogue; necklaces of all kinds are now enjoying great favor, Renaissance designs, and the lighter graceful designs of the Louis XVI. period being most admirable. This last is distinguished by ribbons and garlands.

Enameled jewelry is by no means out of date, but the violet, pansy, marguerite or wild rose has had its day. Now the orchid leads. There are no less than a dozen to choose from for a lace pin, in the heart of which a solitaire of some sort is buried.

Heart-shaped jewelry is found everywhere. Pendants and brooches more often than not are heart-shaped, and no expense is too great to lavish on them. Moonstones and turquois

heart-shaped and surrounded by diamonds, seem to be the favorite stones

An odd but attractive bracelet is made of pale sapphires cut in bud-like forms and suspended between two triangular forms inlaid with diamonds, and intended as conventionalized leaves. These overlap one another, the sapphires being held in perfect relief. The effect is very novel.

A new fashion in all sorts of jewelry is to give the effect of a pin passing through the material. This is done by a concealed hinge and pin. For example, a chatelaine on which is suspended a vinaigrette has a diamond sword as a belt pin. The diamonds are found in the hilt and in the end of the pin, and the concealed pin pierces the stuff. The effect is that of the entire diamond-shaped blade passing the gown. Diamond hair pins are constructed on the same principle instead of having all the ornaments lavished on the top.

A fad of Paris is now the jeweled glove. Some of them have three rows of diamonds so arranged that they could be sewed on to one pair of gloves and yet transferred again to another pair at will. They look most charming on the hand. This fashion seems strange, because embroidered gloves have rarely made much headway in modern times, though centuries ago they were most popular. Fine work is also shown on the new gloves in Paris as well as jewels. The arms and crests of noble and royal houses adorn the top, while flowers and leaves, in designs and in natural colors, cover the outside of the black kid gloves especially, silver lilies of the valley being placed on white kid.

The gift of almost any foolish, dangling bit of jewelry makes a woman happy, but if some one chances to give her just now a funny little gold heart, like the old-fashioned carnelian ones our mothers wore, she slips a fine gold chain through the lover's knot that makes the loop, and hangs it about her neck, if it's a locket, or pins it on the front of her gown if it's a brooch, and feels herself just the happiest woman in all the world. For, you see, she has the very latest ornament that the goldsmith has devised for making her pretty and happy. It may be of gold without ornamentation, unless her name be engraved on one side and some pretty sentiment on the other, or it may have (and then she is blest indeed), a moonstone set in the centre and be rimmed about with brilliants or pearls, or it may even have a big pearl or diamond in place of the moonstone, if she really prefers to have it so, and can have it. But it is just as well if she can't, for the moonstone is quite as pretty and quite as fashionable just now.
— *Manufacturing Jeweler.*

MANUFACTURE OF ARTIFICIAL IVORY.

A very good quality of artificial ivory can be manufactured from bones and the hides of animals. The bones are macerated and bleached in chloride of lime for two weeks: then heated by steam together with the hides until a fluid mass results, and to this a small quantity of alum is added. After filtering the mass and drying in the air it is allowed to harden in an alum bath, yielding white, tough plates, which closely resemble ivory, and are more easily worked than the natural product.— *Globe Democrat.*



THE ILLINOIS WATCH COMPANY

Have placed upon the Market

**A SEVEN JEWELLED, SIX SIZE, NICKEL MOVEMENT, KNOWN AS
No. 149.**

THE ILLINOIS WATCH CO'Y

Will THIS MONTH place upon the Market

A SEVEN JEWELLED, FOURTEEN SIZE, GILDED MOVEMENT, PENDANT SETTING,

KNOWN AS No. 120.

THE ILLINOIS WATCH CO'Y

Will Next Month place upon the market a Movement

PARTICULARLY ADAPTED TO THE CANADIAN TRADE.

THE MODERN SILVERSMITH'S ART.

EUROPE has hitherto been looked upon by the people of this continent as the true home of art work in silversmithing, but it is quite evident from the rapid strides which are being made by the workers in this branch of industry on this side of the Atlantic, that this supremacy will soon, if it is not even now, be a thing of the past.

So far as regards articles of utility for table and other household and personal uses, it has long been admitted that American handicraft, aided as it is by the lavish use of the most perfect machinery, has placed this branch of the industry far ahead of any rivalry that it has hitherto had in Europe. Outside of the practical, however, it has generally been conceded hitherto that the European masters of Silversmithing have attained to a much higher ideal of true artistic production than their compeers in this country, tied down as they were by their surroundings and the needs of the patrons for whom they catered.

This state of affairs, we are glad to say, has of late years been gradually on the change, until at the present time the leading silversmiths of America can put forward specimens of their handicraft that will compare favorably, if they do not surpass the very best works that can be produced abroad.

Foremost amongst the manufacturers of America in this art crusade is the now celebrated Gorham Manufacturing Co., of Providence, R. I., whose goods are now almost as well known throughout the North American Continent as the look of a

U. S. treasury note, and whose stamp and guarantee are regarded by the public as being as worthy of confidence as that of the Hall mark of England.

The magnificent silver trophy, the illustration of which we herewith present to the readers of THE TRADER, was recently finished at the Providence factory of the Gorham Mfg. Co. for

the Coney Island Jockey Club, who call it the "Double Event" prize cup, and by whom it was awarded to the Hon. W. L. Scott, of Erie, Pa., as an award for the remarkable achievements of his three year old horse "Torso" at the Coney Island races last fall. We are indebted to our esteemed contemporary, the *Jeweler's Journal*, of Chicago, for the following description of this remarkable production:—"It seems almost ridiculous to name a tankard of such noble proportions and rare beauty a "cup," but since we have so fine an illustration executed under the supervision of the makers, we will not quarrel with the name. This piece stands twenty-two inches in height, mounted on a highly finished ebony pedestal, as shown in the engraving which shows the trophy one-fourth its actual size. As a specimen of repousse work in the Renaissance style, we believe this is one of the finest specimens



THE W. L. SCOTT PRIZE CUP.

ever executed in silver. The high relief in which the figures and ornamentations are wrought are well-nigh wonderful, so skillfully has the artist brought out and under-cut his work that the casual observer is inclined to believe that they have been molded out separately and applied after the body of the work was complete, although as a matter of fact they have been raised from the body of the tankard and are a part of the same

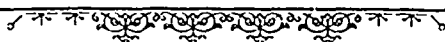


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TO THE TRADE

In thanking you for the very liberal patronage extended to us so far, and asking for a continuance of your favors, we would call attention to some of our special styles.

**Princess or Filed Shell Cases,
Howard Style Cases,
Pateck Phillippe & Co. Cases.**

N. B.--We guarantee our production equal in quality, style and design to any case produced in the market, including American or Swiss.

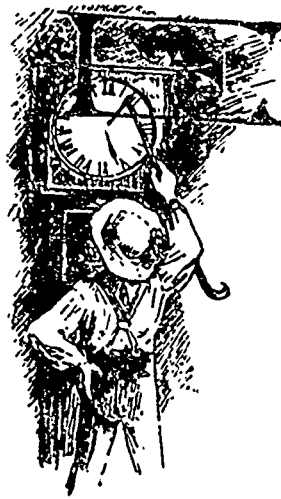
piece of silver of which it is composed. The central and perhaps the most striking feature of the piece is the four horses and riders wrought out so faithful to life that one can plainly see that the artist has chosen the supreme effort of the home-stretch for his subject. The horses and jockeys which form the foreground are more clearly shown than the other details of the race track, which are delineated in the distance with rare skill. The grand stand, with its excited auditory, stands out against a back ground of shade trees and shrubbery, and the inevitable clouds rising from the track are most faithfully wrought out. Upon the uppermost part of the handle, which is composed of wreaths of laurel and acanthus, is seated an exquisitely molded Greek figure of Victory. An attached figure of cupid surmounts the cover holding a scroll upon which is engraved the name of the winner. A German gargoil of a cunning workmanship and mythical design forms the spout of the piece. The cornice over and the base below the landscape are in relief, the artist having blended shells, forget-me-nots, roses and vines in the design. The marked contrasts which the artist has produced by embodying the boldness of the highest relief with the delicate details of flour and leaf is something quite remarkable, and altogether the trophy is one that the owner, though a millionaire, may prize among his richest possessions, as well as a specimen of handwork that will bring new honors to the Gorham Company.

"The more and the closer this beautiful piece of silver is studied, the more will its artistic excellence appear. When the order was given by the club for their "Double Event" trophy for 1889, the Gorham Company were in the midst of the largest trade they had ever secured, and thinking that like many prize winners Mr. Scott might be displeased if he did not receive his trophy soon after it was awarded, they addressed the gentleman stating that it would be a month or more before it could be completed as it ought to be, and his prompt reply was "take all the time you want, six months if necessary, only make it fine." One is forced to conclude that the owner of this piece of silver will feel well repaid for being an ideal customer and for waiting to have it carefully finished in every detail, for he certainly is the possessor of a cup of unusual intrinsic value, fully one thousand dollars, as well as a specimen of art work in precious metal, that will, in all probability, considering its cost, remain unrivalled, at least unsurpassed during the remainder of the century."

FEEDING THE CHICKENS BY CLOCK- WORK.

Fred. Leach, of Ansonia, has some fine poultry, and he believes in feeding them as regularly as he eats his own meals. He is unable to be at home at night before the chickens go to roost, and in order that they may be fed without fail he has rigged up an apparatus which works like a charm. The usual quantity of corn is placed in a tin can, which is suspended from a string and weighted. An alarm clock in the outer coop releases the string at a certain hour, the can turns bottom side up and the corn is scattered. There are four coops, and each has its can, all working at the same time.—*New Haven Palladium.*

WAYLAYING A STAGE.



VERY steamer which comes up from Ensenada for several months past has brought to this city from \$3,000 to \$10,000 worth of dust and nuggets from the mines at Alamo and other points on the peninsula, and this fact has finally excited the cupidity of highwaymen, as the treasure must be carried from forty to sixty miles over an uninhabited country to reach Ensenada.

The first stage robbery occurred several days ago, and several of the stage passengers came up this morning on the steamer. William J. Vaughn, a pioneer storekeeper of Alamo, was one of them, and from him the following particulars of the holdup are gleaned:

The stage, which makes semi-weekly trips from Alamo to Ensenada, had preceded about five miles from the former place, with H. H. Douglass driving and eight passengers, including Vaughn and Major Zimpleman. The major, who is president of the El Paso mine, had between \$7,000 and \$8,000 worth of bullion aboard, which had just been cleaned up at his mine. There was \$10,000 at least in the stage. The \$2,500 or more cleanup made by the International Company the day before was to have been forwarded, but had for some reason not been sent.

At a point in the road where a bluff some eight feet in height shields it, a noise came from the brush. It was repeated three times, when Mr. Douglass at last caught the words, "Hold on there." The passengers looked around and saw that a man partially concealed in the bushes had them covered with a rifle.

"Throw out that International bullion," he commanded in an unmistakably American voice. Douglass reined up his horses, and, looking coolly at the weapon said, with a resolute accent: "We haven't any bullion." The highwayman apparently doubted this, for he repeated the demand twice, receiving the same reply from Douglass. "Throw off what you have," then said the fellow.

Two of the passengers threw eighteen silver dollars and a beer check into the road. One man then started to get out, when the highwayman yelled for him to get back, and added: "drive on like ——" They did so, but stopped after going about 150 yards, and Douglass took a rifle and one of the others a pistol and walked back. They finally sighted the man, but he at once disappeared in the brush and was seen no more. The party differ in describing the outlaw, but all seem to agree that he was a novice and a resident of Alamo. A number of Mexican rurales are after him, and if caught and convicted he will be shot, that being the penalty for highway robbery in Mexico.—San Diego dispatch in *San Francisco Chronicle.*

For polishing brass add to sulphuric acid half its bulk of bichromate of potash, dilute with an equal weight of water and apply well to the brass, rinse it well immediately in water, wipe dry and polish with pulverized rotten stone.



FANS.

The Fan Trade is the special province of the Jewelry store. By Fans we mean Evening Fans. Not Japanese 2 for 5's.

We do not want to boast, but we think we have the line of Fans in Canada to-day.

We know, for we are constantly told, that our prices are lower than have ever been offered in Canada before.

We have sold out clean our whole January shipment. We have also sold in advance the greater part of two large lots arriving in May and June, and we have another large lot on order.

Write for sample lot! Never miss seeing our Travellers' samples.

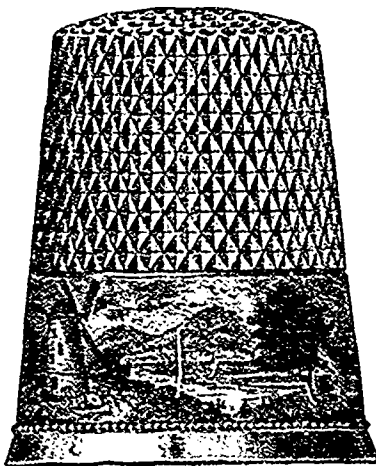
The Fan Trade is one of the nicest and most profitable lines at the present time.

THE HEMMING BROS. CO., LIMITED,
76 YORK STREET, TORONTO.

SIMONS BRO. & CO.

MANUFACTURERS OF FINE JEWELRY,

Canes, Thimbles, Jewelry, Chains, Umbrella Mountings



WATCHES AND DIAMONDS

Established 1840.



611 & 613 Sanson St., 618 Chestnut St.,
PHILADELPHIA, PA.

*Our Canes and Thimbles for sale by
Leading Jobbers.*



No. 573. 7/8 in.

N.Y. Office, 20 Maiden Lane.

Address all Orders to Factory.

THE PATHETIC SIDE OF WATCH MAKING BY MACHINERY.



WHEN a Mohammedan opens his eyes in the morning, and can distinguish the difference between a black thread and a white one, he knows that it is prayer time. No other clock is needed. In lands where they have no clocks or watches, very simple methods are adopted for measuring time, but with each increase in civilization there comes the necessity for more accurate means of arriving at correct time. It is confidently affirmed that the water clock or clepsydra was used long before the sun dial, and that toothed wheels were used for the water clock about 145 B. C. But the real origin of clocks is very doubtful. Whoever invented them matters very little now, for most scholars are inclined to think that the evolution of time measures was very gradual, and we may safely assume that it was not until after Harrison's invention of the chronometer that the real business of watchmaking began.

TIME PIECES AS MONEY.

Early last century the descendants of the iron-workers in Prescott had taken to making the works for watches; and they became famous for their skill in producing the different parts of the time measures. Liverpool became the centre of a vast watch trade, and in the early part of the present century it was famous all over the world for its watches. A few great names survive even now amongst the manufacturers of chronometers. One curious feature in the watch-movement trade is recalled by old men even now. The great makers were named Tobias, and they used to export many thousands of movements every year. Owing to some peculiarity in the United States laws, it was possible to send there small boxes of movements, which were to be cased in America. The frame of these boxes of Tobias' movements was so great that they were used as a medium of exchange, and thousands of bales of cotton and countless negroes were bought by means of the small boxes, which each contained half a dozen watch movements from Liverpool. In later years, when money became more abundant and general confidence was restored, some of these boxes were opened to have the works put into cases, and it was found that the delicate little mechanism had rusted away. The boxes had served for money for such a long time that their contents had gone to ruin.

THE AMERICANS GET IN THEIR FINE WORK.

The enormous exportation of watches and watch movements made it necessary to employ other men besides the skilled artificers of Liverpool and London. And what place was more likely to become the centre of the movement industry than Prescott? It had a small trade already, and the skill had never departed from its workers; so, because Liverpool was busy and rich, Prescott shared in its prosperity. It seems odd to us to look at the quiet little town now and see where the men did their work. They lived in narrow courts and

alleys, built little workshops over their ashpits, and toiled away, early and late, in the most unsanitary and unhealthy places. Their machinery consisted of a lathe worked by hand, a curious-looking little bow, and the sharp tools which Prescott men had so well learned how to make. When a man constructed the movements for a watch, they worked well in that particular watch, but in no other, for the parts were not interchangeable. Each wheel and pinion and part made by itself was "hand made," so that if a wheel was lost a new one had to be made specially. But the Swiss cottagers learned how to make cheap watches, and, suffering from the competition, the men of Prescott began to starve. Then the Americans got hold of the industry. They saw how the Swiss worked, and they invented machinery for doing more accurately and more cheaply what these hand toilers had done, and we adopted the American watch. The Lancashire man and the Swiss were starving together, and it looked as if the glory of the trade had departed from our country-side forever. The men at Prescott still made "movements" but on a small scale. The little workshops, like beehives, were closed and idle; the little lathes were silent, and only a few of the old men still clung to the methods which would now scarcely buy bread. Cheap and miserable "movements" were bought in Switzerland and put into English cases, and were passed off for English watches; and the idle men of Prescott saw the swindle, but were powerless against it.

CHANGES WROUGHT IN THE BUSINESS.

The Merchandise Marks Act, 1887, was meant to compel foreigners to stamp on their goods the country of their origin. We are to know when we buy Swiss watches and when we buy English. That was all the Prescott men wanted, and a new life has come pulsating through the sleepy little town. Meetings have been held, a watch company has been formed, a factory has been erected, complex machinery has been purchased, and the work is already in full blast.

The new company is to manufacture all the movements of a watch, and ultimately to make watches. They make also the machinery for Wauzer lamps and steam gauges, and all such things, so that the mechanics of the town have more than one string to their bow, and they ought to succeed in their new venture. If the company is a success, and pays a good dividend, people will say, "We knew it;" but if it fails, woe be to the hardy spirits who dared to stake their all on the skill of Prescott mechanics, to back them against the world.

The sight of the old watchmakers— or rather movement makers—who stand by and observe the new departure, is a sad one. The world has left them behind. I went into one little cottage where dwelt a toiler who had been making "centre pinions" for sixty years. The cottage was a single story, with a modern slate roof, rickety and poor. The place presented every token of pitiful poverty, yet the little old wife was as bright and cheery as if the world had gone well with herself and husband. Once upon a time, when she was young and her husband was strong, and Swiss and American watches were unknown, they had made good wages. But evil times had fallen on them, and the best bits of furniture had faded out of the poor watchmaker's cottage, until it was bare and poor and desolate. When the promise of good times came again to the sleepy town the old man's hand had lost its cunning and the



"You cannot check Manitoba!"

NO GOODS AT RETAIL.

Some of our would-be competitors have been dishonest enough to try and injure our business by stating to our Customers that we sell goods at Retail.

Now, we wish it distinctly understood that we protect our Customers, always have and always intend to, do **ONLY** a **WHOLESALE TRADE**, belong to **NO COMBINATION**, and sell goods to suit **OURSELVES** and our **CUSTOMERS**.

We have now removed to our large and commodious new premises at 433 and 435 Main Street, where we shall be pleased to see you when in our city, and show you the finest Wholesale Jewelry Warerooms in Canada.

Yours truly,

Winnipeg, Man.

W. F. DOLL.



Louis Davis & Company.

MONTREAL.

WHOLESALE JEWELLERS & DEALERS IN
PRECIOUS STONES.

NOVELTIES ARE OUR **GREAT SPECIALTY**
IN EVERY LINE OF GOLD & SILVER JEWELRY.

THIS WE MAKE *The Feature* OF OUR BUSINESS.

Sole Agents in the Dominion of Canada for the Celebrated Window Fronts
and Shop Fixtures of **F. SAGE & CO. of LONDON, ENG.**

CATALOGUES AND ALL INFORMATION IN CONNECTION WITH SHOP BUILDING &
WINDOW FITTING SUPPLIED BY MAIL UPON APPLICATION.





brightness had gone from his eye. He made centre pinions before railroads had been introduced in the land. He made centre pinions when a watch was a valuable possession, and only rich people wore such a thing; he worked at the watch trade before steam was used, or machinery; and now he stood helpless in the midst of the swelling waves of a new era.

NEW WORKS AND NEW WORKERS.

He scarcely knows what to make of it all, while his cheery little wife looks on with wonderment in her face. The new men are kind to the old men. The workers who have brought steam to their aid and complicated machines are yet very sympathetic toward the men who bind them to the past, and they give the old fellows work; but, unfortunately, the work is of little value. The young men with steady hands and keen eyes, make good wages; but the feeble old man can barely make 12s. per week, and in his heart, no doubt, he abhors the new, modern, progressive notions. But he must make way. Out from the old man's cottage window, where he sits at his lathe making the poor centre pinions—which a modern machine makes much quicker and better—he used to see the green fields, and the hedgerows and the blue sky. But that is over now. A new red brick building has risen on the field which lies next to his house, and here the modern watchmakers are at work. Only last May the Lady Margaret Cecil came from Knowsley Hall to lay the foundation stone of that building, and the townspeople shouted hurrah, and the bands played, and the flags floated gaily to the wind. But it all boded ill to the old man. New workers have come to the vast factory, and they work under healthy conditions, assisted by the most delicate machinery that man has ever made; and the old centre pinion maker has to go to the wall. So the new forces come in, and the old men pass away, and as they pass we can scarcely hear them moan. But if the new trade prospers in Prescott we will try and forget the poor old fellows who could not adapt themselves to the new conditions, and we will join in the hurrahs that laid the birth of a new industry.—*Leeds Mercury*.

A LITTLE NORTHWESTERN FAD.

St. Paul has originated a fad of its own in one case instead of borrowing from the effete East. The particular home-made fad consists in cutting out the centre of a silver dime, using the rim for a ring, and attaching to it by a little chain the rounded centre, which is adorned by the monogram of the giver. The society young lady, the school girl and members of the theatrical profession have been caught by this seemingly clumsy arrangement. Travelling men have bought them to send away, and business men have purchased them for gift trifles. Said a jeweler on Wabash street, yesterday: "I have sold 1,500 since the middle of December." At first thought it would seem that the ring would be brittle, being cut from a coin which is stamped out, but it is not. Any one who will explain its attraction can solve any riddle, but it's a craze at present. By the way, all changes are coming in the line of silver. The metal is becoming so plentiful that almost every article is produced in it, and the opportunities which it furnishes for artistic work are unlimited. The result is that gold as a medium for designs is at present given the go-by.—*St. Paul Pioneer Press*.

FIGHTING FOR DIAMONDS.



ANOTHER bold attempt to rob Hyman, Berg & Co., of 127 State street, Chicago, on April 3, was frustrated by the precaution of one of their salesmen and the prompt action of the Palmer House employees. Sunday morning, March 2, a well-dressed stranger, about five feet, three inches tall, of stout build and dark complexion, with a short black moustache and closely cropped black hair, registered at the Palmer House as R. A. Allen, and giving

no address. He appeared as though he had been drinking heavily and was very nervous. He was assigned to room 649, on the sixth floor, and was not seen in the hotel office again for several days, when he called for some letters. On April 3, Allen summoned several messengers and sent them to several stores with letters. One of these letters was addressed to Hyman, Berg & Co., and read:

Hyman, Berg & Co.,

GENTLEMEN—Please send for my inspection to room 649, in the Palmer House, several diamond rings and pins. Do not send very high priced stones as I do not want to pay more than \$125 for the ring and \$65 for the pin. I fell down and sprained my ankle last night, and so am unable to go to your store. I am in a hurry, as I will leave for Louisville to-night, if I am able to ride in a cab.

Very Respectfully,

RALPH A. ALLEN.

The firm often receive requests to send goods for examination, but thought it was very odd that Allen could not postpone his purchase until he was able to get out or until he had reached Louisville. The whole thing looked so suspicious that they decided to send salesman William A. Bigler to investigate before sending the diamonds. Mr. Bigler was chosen because he is a large, powerful man and also because he boards at that establishment. Mr. Bigler went to the room indicated, where he found Allen with one of his feet bare and immersed in a pan of water. He explained that he came in answer to the written request, and Allen said he wanted the diamonds for a present, and that unfortunately he had slipped on the marble stairs the night before and sprained his ankle. During the interview he continued to rub his ankle with arnica and made considerable fuss about the pain in it. The salesman returned to the store and repeated the story. The firm decided to send the diamonds, first cautioning Bigler to be very careful, as only two weeks before (as reported in these columns) an attempt was made to rob them of diamonds.

Bigler returned to the hotel with an assortment of rings and pins and single diamonds unmounted, valued altogether at about \$1,500. He took no chances, but stationed porter Louis Perrat near the door of the room before entering. Bigler took a chair near the window, and drawing up a table



CASES FOR JEWELERS ONLY.

THE American Watch Case Co., of Toronto, ask the attention of the Jewelers of Canada to the following new Cases, which are the cheapest and best goods for the money in America.



PATENT SCREW CASE.

This Case has Screw Back and Bezel, and will fit either Pendant or Lever Set Movements. It is made in 10 K. and 14 K. Gold Filled, and also in Sterling Silver.

The "NEVADA" Silver Case weighs a little over 2 ozs., and can be had either Plain Polished, or Engraved as shown in above cut. They are made of Solid Coin Silver throughout, and every Case contains our well-known trade mark of the Maltese Cross.

This Case was reduced 50 cents in price last month, and the Canadian Retail Jeweler can now buy it for 90 cents less than the American Retail Jeweler can buy a similar Case of American manufacture in the U. S.

The "FORTUNE," 10 K. Gold Filled Case is of the same pattern, and is made of two plates of 10 K. Gold overlaying a plate of composition metal, has a Solid Gold Bow, and is made to wear for 15 years.

We guarantee this Case to contain at least 20 per cent. more gold than any similar case imported into Canada, and that the Canadian Retail Jeweler can buy it cheaper than American Retail Jewelers can buy a similar Case of American goods in the U.S.

The "CASHIER," 14 K. Gold Filled Case is also of the same pattern. It is made of two plates of 14 K. Gold overlaying a plate of composition metal, and is made to wear for 21 years.



THE BASSINE "N.P." CASE.

This Case has Jointed Bezel, Cap, and Back, and is made of Solid Coin Silver with Albata Cap.

The Canadian Retail Jeweler can buy this Case for 75 cents less than the American Retail Jeweler can buy a similar Case of American manufacture in the United States.

It is made in Open case only, can be had in either Key or Stem Wind, and is the best value Watch Case ever offered to the trade of this country.

Every one of these Cases has our well-known Trade Mark of the Maltese Cross, and like all other goods of our manufacture, is guaranteed by our Company no matter by whom sold.

We challenge any factory in America to show a case equal to the "N.P." for the same money. Examine it carefully.

We do not sell any goods to Tea and Coffee men, Wholesale Grocers, Spice Manufacturers, Auctioneers, Lottery Fakirs, or outsiders of any kind.

Our Cases are made specially for the best Jewelry Trade, and will as heretofore be sold exclusively to Wholesale Jewelers.



opened the package. After carefully examining all the diamonds, Allen selected one ring and a pin.

"Bundle the rest of them up while I get the money," he said; and he drew his bare foot out of the water and painfully hobbled around back of Bigler and stooped down as though to take the money from under the mattress of the bed. Bigler was just about to look behind him, for he had been suspicious all the time, when he was half stunned by a terrific blow on the head. He got upon his feet and faced Allen in time to partially ward off the next blow, but the heavy cane in Allen's hand descended with terrific force and was broken over Bigler's up-raised arm, and not, however, until it had again laid open his head. Bigler yelled, and Allen, not stopping to seize the package, hastily left the room and rushed down the hall. Ferrat, the porter, rushed after him, but soon lost him in a blind passage.

Allen ran down the fifth floor, yelling, "catch that insane man?" to the porters and bell-boys who had been attracted by Bigler's cries. Several porters were fooled by the cry, but Cecil Gregg, the timekeeper, followed Allen and finally cornered him in a room where he hid under a bed.

Bigler was found unconscious in Allen's room and was bleeding profusely from two ugly wounds on the head. Doctors soon revived him and sewed up his wounds and expressed their belief that he was in no danger unless inflammation should set in. Allen refuses to disclose his identity and declares this is his first offense. He says that rather than prove that he is not a common criminal, by disclosing his identity, he will go to jail. Papers found in his possession show that he came from Washington by way of Cincinnati, and that he has been in Philadelphia recently. A book issued by the Union Trust Company of Philadelphia, found on his person, bears the name of George A. Pearce.

The police do not place any "stock" in his claim that it is his first offense, but believe that he is one of a "gang" of diamond thieves that have been making this city their headquarters for some weeks. As reported in the *Jeweler*, several large jewelry houses in the city have lately suffered severely through thefts—*Manufacturing Jeweler*.

THE SHOT TOWER INVENTED IN SLEEP.

The following keeps continually going the rounds of the press, and does not appear to be contradicted. The probabilities are that when people are dreaming they are partly awake. The writer has made rhymes in dreams, but always forgets them on fully awaking.

Before Watts had his dream, the making of shot was a slow, laborious and consequently costly process. Watts had to take great bars of lead and pound them out into sheets of a thickness nearly equal to the diameter of the shots he desired to make. He then had to cut these sheets into little cubes, place the cubes in a revolving barrel and roll the barrel around until by the constant friction the edges wore off from the little cubes and they became spheroids.

Watts had often racked his brain trying to discover some better and less costly scheme, but in vain. Finally, after

spending an evening with some boon companions at the ale house, he went home and went to bed. He soon fell into a profound slumber, but the stimulants he had imbibed apparently disagreed with him, for his sleep was disturbed by unwelcome dreams. He imagined he was out again with the "boys," and that as they were all stumbling homeward in the dark it began to rain shot. Beautiful globules of lead, polished and shining, fell in a torrent and compelled him and his bibulous companions to drag their heavy limbs to a place of shelter.

In the morning when Watts arose, he remembered his dream. He turned it over in his mind all day and wondered what shape molten lead would assume in falling through the air. These thoughts tormented him so persistently that at last to set his mind at rest, he carried a ladleful of molten lead to the top of the steeple of the Church of St. Mary of Redcliffe and dropped it into the moat below. Descending he took from the bottom of the shallow pool several handfuls of the most perfect shot he had ever seen. Watt's fortune was made for he had conceived the idea of the shot-tower, which ever since has been the only means employed in the manufacture of the little missiles so important in war and sport.—*Ex.*

NOT DISPOSED TO INVEST IN SILVER-WARE.

"We meet some queer people among the many who are constantly flitting into and out of this store, but an old man and his wife, upon whom I waited a few days ago, took the prize for pure, unadulterated simplicity. The couple were evidently on their first visit from the country. When I approached them the old lady, who was undoubtedly master of ceremonies, stated that they wanted to purchase a soup tureen.

"Do you want plated ware or silver?" I asked.

"Solid silver ter be sure," the woman responded, with a glance that, had I been anybody else than a salesman, would have frozen me.

"After seeing a number of designs, the old lady decided upon one and inquired the price.

"One hundred and twenty dollars," I answered, as I called a boy to take the article to the shipping room.

"What!" she almost screamed. "One hundred and twenty dollars for that? Wall I swan!" For a few minutes they gazed at me, as if I had expressed an intention of robbing them, after which they conferred together. Presently the old gentleman turned around, and in a quivering voice said he guessed they'd better buy a plated tureen, as that was just as good.

"We have several dozen designs in plated ware in stock, and after critically examining each one the old lady plucked up courage enough to ask the price of one that had only recently been produced, and was selling for \$18. When I mentioned the price, she looked blankly at her husband and said she guessed we didn't have anything to suit them. As they were going out of the store, I overheard the remark: 'What mighty dear stores these in New York are ter be sure. I wouldn't pay mor'n \$3 for a soup tureen—no, not if it was the only one in the country.'—*Jewelers' Weekly*.



THE TORONTO SILVER PLATE CO.

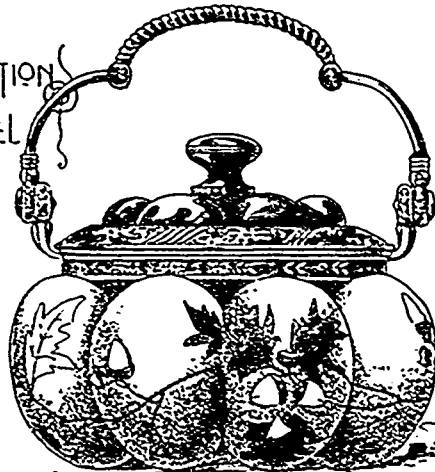
CRACKER JAR
 ASSORTED DECORATIONS IN
 ALBERTINE AND ROYAL
 FLEMISH
 Permanent Enamel
 Colors & Gold.
 QUADRUPLE PLATE COVER
 LACQUERED OLD SILVER
 FINISH.



Height to top of handle 9 1/2 inches

ASSORTED DECORATIONS
 IN PERMANENT ENAMEL
 COLORS & GOLD

COVERS
 QUADRUPLE PLATE
 OLD SILVER FINISH
 LACQUERED



Height to top of handle 5 1/2 inches

FOR
 MARMALADE.
 SUGAR.
 BOU BONIERE.
 JEWELRY.
 OR ROSE LEAVES

TORONTO, CANADA.

E. G. GOODERHAM,
 Manager.

J. C. COPP,
 Sec.-Treas.



THE LENGTH OF A DAY.



Prof. F. H. Bailey makes the interesting statement in the *Boston Journal of Education*, that the day contains exactly forty eight hours, and the week, though seven times as long as the day for any one locality, is—upon the earth as a whole—only four times as long. "We readily perceive," he says, "that the natural day travels around the earth with the sun and never ends, it being day or day-time continuously on the half of

the earth toward the sun, and night on the opposite half. The date, or almanac day, travels the same way and with the same speed, and if it had no place for beginning or ending it would always be the same date.

"We will commence with the beginning of the first day of the year. It is the moment of noon December 31st, on the meridian of Greenwich; forenoon over the Western Hemisphere and afternoon over the Eastern. The mean sun is exactly in the south, and at this moment the first day of the new year is born. Where? Not at Greenwich. The civil day begins at midnight, and it is midnight on the 180th meridian at this moment, and there New Year's Day begins. As the sun travels westward from Greenwich across the Atlantic and America, New Year marches westward across the Pacific and Asia, conquering the earth at the rate of one twenty-fourth part every hour. By the time the sun reaches the Mississippi Valley it is evening of the last day of the year in England, but January 1 holds sway over one-fourth of the earth—that lying between the 90th meridian east of Greenwich and the 180th.

Six hours later, when the sun has travelled half way around the earth and is over the 180th meridian, New Year's has reached Greenwich and sways one half of the earth. In another six hours the bells of the Mississippi Valley are ringing in the new year, but it has been on earth eighteen hours. And in six more, the sun is again over the meridian of Greenwich, and New Year's exists for a single moment over the entire earth. But Mother Earth does not stop her waltzing, nor Old Sol his westward journey, and the second day of January puts in his appearance where the first did twenty-four hours before, and immediately commences chasing his elder brother around the earth at the rate of more than a thousand miles an hour, the chase continuing for exactly twenty-four hours, during which the portion of the earth under the sway of January 1 is continually decreasing and that of the 2nd increasing.

Another method of presenting the same facts may be considered better. Think of the days past and future as threads each wound upon its own spool, and of sufficient length to reach, when unwound, around the earth at the equator. The spools are kept at the 180th meridian. Those bearing past dates having been used, future dates waiting their time, and always two in use at once. When it is noon at Greenwich on the 31st of December, the spool bearing that date is empty and its thread girdles the earth. Beside it, rotating about the same axis (the 180th meridian) is the spool dated January 1, and at that moment some power capable of travelling a thousand

miles an hour, seizes the end of the thread and flies westward; the thread unwinds; the other spool rotates at the same velocity, but is winding up the thread of December 31, dragging it around the earth, the free end keeping exactly even with the advancing end of January 1. Each thread is exactly twenty-four hours unwinding and the same winding up again, and the portion of the earth lying north and south of the unwound part of each thread bears its date; consequently each date exists upon the earth for forty-eight hours, or a little more than two complete rotations of the earth upon its axis. It is evident that the thread of any day has been unwinding seventeen hours when it reaches the seventy fifth meridian west of Greenwich, that it is twenty-four hours dragging itself across the line, and that it will be seven hours longer before it is entirely wound upon its spool and the date is past for the entire earth.

ADVERTISING.



NE of the subjects of deepest interest to business men is advertising, who, although they may differ as to methods, are practically unanimous in considering it a profitable investment, because there is no other way of keeping a man and his wares before that wide and scattered public to which he must pay court if he could succeed.

But money may be thrown away in advertising just as it may be lost by injudicious investments or unseasonable purchases in other departments of business. In this, as in other things, he who would make it profitable must be observing and inquiring. Hap-hazard methods do not bring success to any undertaking. The best advertisers—*i. e.*, those who advertise because they find it profitable—are those who have studied the subject, who know just what class they desire to reach, and the medium that will enable them to do it: who know what they want to say, and say it in language that invites confidence.

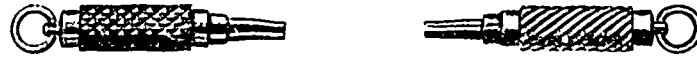
As for mediums, trade journals are acknowledged to be the most effective in reaching special classes. It has been wisely said: "A good trade journal is a guide and directory of the trade for which it is published," and if honorably conducted "it soon becomes a recommendation of the articles advertised in its pages." In truth, it becomes a sort of ready reference, and the more crowded its advertising columns are, the more valuable it becomes in this sense.

What makes advertising valuable to the advertiser is the certainty that what he says will be widely read by people interested in obtaining the information he offers—in other words, circulation. Nothing proves this more conclusively than the hard and fast lying unscrupulous publishers will indulge in about the size of their editions. Naturally, the advertiser considers it of the utmost importance that he should reach, as nearly as possible, every person likely to be interested in the subject-matter of his advertisement. That is why he advertises, and that, also, is why the circulation liar is abroad.

The advertising columns of a journal represent persons seeking benefits—sellers bidding for purchasers, buyers looking for



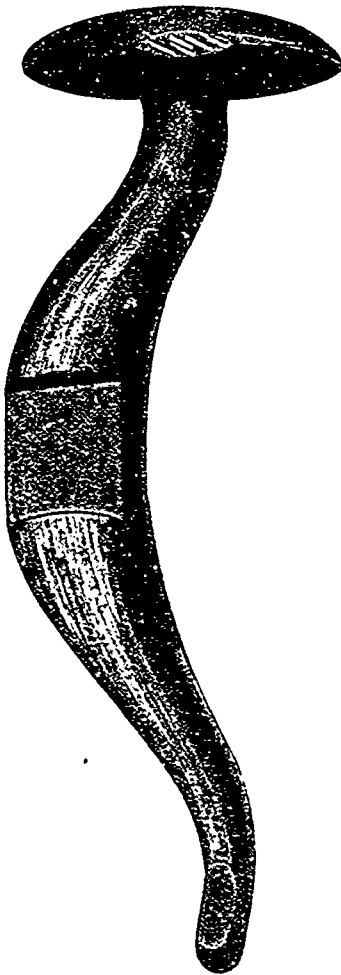
THE CHERUB WATCH KEY.



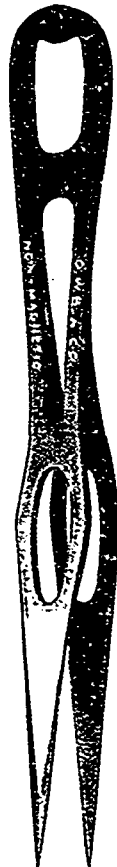
We have just received a large consignment of **CHERUB KEYS** from the celebrated makers **KENDRICK & DAVIS**, of Lebanon, N. H., which are exactly the same as the **GEM**, with the exception of not having the Dust-Proof Slot which is so expensive to make in **WATCH KEY PIPES**.

These Keys are a perfect finish Nickel-Plated Barrel, with a tempered Steel Pipe and a Swivel Jump Ring at top Pattern. as per above cuts. They roll nicely in the fingers. Any size as desired. Try a gross and be pleased. Price **\$3 00** per Gross.

SOME NEW TOOLS.



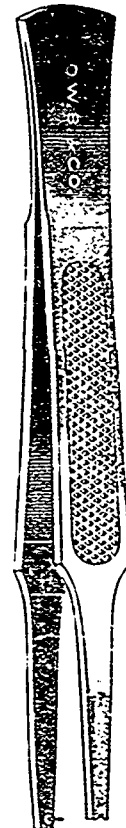
NICKEL-PLATED.
No. 5 75c.



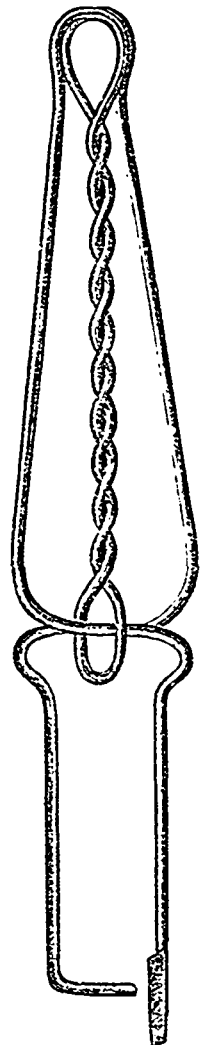
NICKEL-PLATED
NON-MAGNETIC.
No. 4. 50c.



NICKEL-PLATED.
No. 3. 75c.



NICKEL-PLATED.
No. 1. 50c



No. 2. 20c.

P. W. ELLIS & CO.,

TORONTO, ONT.

31 WELLINGTON ST. EAST AND 40 FRONT ST. EAST.

Note our Jewelry Department Ad. on Page 2 of Cover.



advantages, and the wider public they can command the more speedily will each be accommodated. Hence, to the advertiser, circulation has a distinct money value, and he requires definite statements regarding it before he will invest. The trouble is, however, that, being a busy man, he is too often satisfied with the publisher's simple assertion, though not generally too busy to growl when returns do not show up. There are many ways by which false statements about circulation can be nailed, and advertisers who would not only consult their own interests, but would benefit both their fellows in trade, and the cause of honest journalism if they would refuse to accept the unsupported testimony of publishers. Upright publishers are glad to have their statements proved, and will place no difficulty in the way of investigation.

Advertising on the basis of issues alone shows lack of good judgment. A journal may turn out an issue every day in the week, but if it has no circulation, or if what little it has, is managed with a view to bolster up false pretences, the advertiser is simply the dupe of a fraud. This kind of advertising is something of a bunco game, with the publisher as steerer and the indolent, careless, or credulous advertiser in the role of "Greenblow, from Way back." The only safe plan to pursue with advertising leeches, is to say, "produce your affidavits, my friends, and permit me to make inquiries of your printer and postmaster."—*Geyer's Stationer.*

MOTTOES FOR SUN DIALS.

Dials live over into this age of cheap clocks and watches, not by reason of their use or convenience, but because of their associations. They were formerly designed with taste and bore inscriptions suited to their purpose. Many of these are historic, as the one that used to be at Paul's Cross in London, which said, in Latin, "I number none but sunny hours." An old-fashioned dial in a garden of Sussex, England, is said to bear upon its plate these four mottoes, each for its own season: "After darkness, light;" "Alas! how swift;" "I warn whilst I move;" "So passes life." Familiar old mottoes are some of our every-day proverbs. Some of these are: "All things do wax and wane;" "The longest day must end;" "Make hay while the sun shines." One of the most appropriate of these mottoes used to be borne by a dial that stood in the old Temple Gardens, and it is said to have been furnished by the great Lord Chancellor Bacon. His lordship was hard at work one day in his chambers, when an idle student dropped in to ask for a motto for the new sun dial which was then being built. Twice the student humbly made his request, but the grave chancellor gave no reply or sign of having heard it. At last, as the petitioner began for the third time, Bacon looked up and said angrily, "Sirrah, be gone about your business!" "A thousand thanks, my lord," replied the suitor, "the very thing for the dial! Nothing could be better."—*Youth's Companion.*

EDITORIAL NOTES

SPECIAL NOTICE.

Jewelers throughout Canada will oblige the Editor by sending into this office for insertion in these notes any items of news pertaining to the Jewelry business that they think would be of interest to the Trade generally.

JUMP RINGS—G. H. Lees & Co. of Hamilton, advertise in this issue an assortment of jump rings, which it will pay every jeweler to examine into.

MR. R. Y. ELLIS, of the firm of P. W. Ellis & Co., was laid up for a few days last month, but as we are glad to stay, about again almost as well as usual.

A. C. ANDERSON is down in the Maritime Provinces hustling trade for all he is worth, and reports a very satisfactory and gratifying business for this time of the year.

BANKRUPT STOCK SOLD—The bankrupt stock of Messrs J & J. Forbes, of St. Thomas, Ont., was sold en bloc on April 1st, and realized 45 cents on the dollar.

S. FOGLE, retail jeweler of Queen Street, of this city, has removed his business to 154 Yonge Street, where he has fitted up one of the tastiest establishments in the city.

REMOVAL—Mr. F. T. Withcome, of New Glasgow, N. B., has removed to Annapolis, N. S., where he has opened out a retail jewelry business on his own account.

FIRE—Mr. D. Horning, jeweler, of Waterford, Ont., was badly scorched in the big fire which took place in that town on the 7th of last month. We trust that he was fully covered by insurance.

JOHN WANLESS & SON, retail jewelers of this city, are making some very extensive alterations to their premises, which when completed will make it one of the finest jewelry stores in Canada. We will give a detailed description later.

MR. GEORGE CHILLAS has just returned from a trip through Quebec and the Maritime Provinces. He found trade fairly good down east, and thinks the prospects are that, if crops are anyway good this year, the fall trade will be much larger than usual.

MR. CHARLES ADDISON, the popular Ottawa retail jeweler, was in the city last month for a couple of days on business, during which time he was the guest of his brother, Mr. Fred. Addison, the well-known "Knight of the Grip" on the Eastern road.

MR. BERT. WILKINS, the rising young horologist, who has lately been perfecting himself under the tuition of Mr. E. Beeton, of this city, has gone to Sarnia, where he will sport his eyeglass in the shop of Mr. D. Barr, of that burg.

ENJOYABLE—We have to thank Mr. William Allen Young, the genial general agent of the Dueber-Hampden Company in Canada, for a consignment of luscious naval oranges grown on his orange grove at Riverside, California, U. S.

MR. JOHN G. WITTE, of New York, for many years known to the wholesale jewelry and fancy goods trade of Canada, last month in a fit of temporary insanity committed suicide by shooting himself through the head at the St. Lawrence Hall Hotel, Montreal.

THE ACME SILVER Co. are pushing their foreign trade for all it is worth, and report for the past month a large increase in their sales in the West Indies, Cuba, South America, Mexico and Australia. President Parker says that when they get into their new premises he intends to make trade hump.

COMPROMISED—Mr. Liffiton, who has been liquidating the estate of Liffiton & Chandler, wholesale jewelers, of Montreal, has effected a compromise with the creditors of the estate at 40 cents on the dollar. It is generally understood that Mr. Liffiton will now continue the business on his own account.

SALE OF STOCK—The stock of George Andrew, jeweler, of Winnipeg, was sold by Sheriff's sale last month to H. J. Joseph, of Louis Davis & Co., of Montreal, and realized 46 cents on the dollar. It is thought

"HAVE you been fighting?" asked a man of his friend, who had one arm in a sling, his head bound up and his clothes looking as if he had been struck by a cyclone. "Not exactly," he sadly replied; "I've only been helping my wife pull up carpets and take down pictures."



FANCY CASES.

TOILET, JEWEL,
MANICURE, ODOR,
SHAVING, GLOVE AND
HANDKERCHIEF,



COLLAR AND CUFF,
TRAVELLING
COMPANION,
WORK BOXES, &C.,

MADE IN PLUSH, SATIN, LEATHER, SILVER, ROCOCO.

Nine-tenths of our Enormous Line is quite new

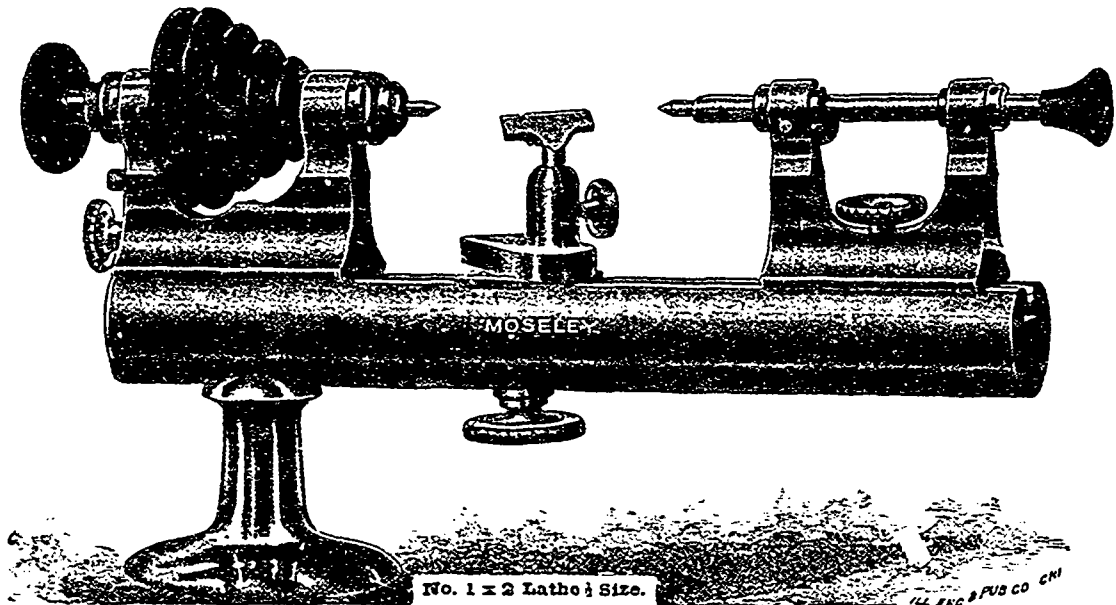
AND WE ARE VERY PROUD OF IT.

Our Travellers have just started out with their Samples, and we ask the Trade not to miss them on this trip, as other goods will have to take the place of Cases on their next trip, and their line will be reduced fully 67 per cent.

Our Prices always did touch Rock This year we have blasted through the Rock and are now resting on Iron

THE HEMMING BROS. CO., Ltd. * 76 York St. TORONTO.

QUALITY IS THE STANDARD OF VALUE.
WE COMPETE FOR QUALITY, NOT QUANTITY.



No. 1 x 2 Lathes Size.

ALL ENG. & PUS CO. CH.



No. 1 X 2 WIRE CHUCK.

All our Chucks are stamped "Moseley" on the face and warranted.
Cut of Chucks Full Size.

Note. The larger capacity of our Wire Chucks many times makes up for the difference in price, should there be any.

ALBERT KLEISER,
NO. 14 KING STREET EAST,

MARTIN'S GENEVA MAINSPRINGS.

This is the finest Spring ever offered to the Trade in Canada. Send for sample doz. and be convinced.

	Per Doz.
Martin's Springs for Waltham and Elgin Watches, 18 Size, -	\$1 25
" " for Swiss Watches, all sizes, - - - - -	1 00

For Sale only by A. KLEISER, Wholesale Dealer in Watch Materials of all kinds.

Sole Agent for the Dominion for the Moseley Lathe, -
Wholesale Dealer in Watch Materials of all Kinds,
- TORONTO, ONT.



probable in jewelry circles that the purchasers will give Mr. Andrew a chance to continue the business.

VIVIAN & MERRITT have opened out a new jewelry business in Windsor, Ont. These gentlemen were formerly employed in the store of Tranb Bros., Detroit, Mich., U. S., and are therefore new additions to the ranks of the Canadian jewelry trade. Their new store is said to be one of the best in Windsor.

WE HAD A VISIT last month from Mr. Jacob Bunn, jr., Vice-President of the Illinois Watch Co. He reports the best year's trade so far that his Company has ever had, and feels sure that the reputation of their movements as reliable timekeepers is now so firmly established that they can easily market all they can possibly produce.

MR. MATTHEW GAGE, formerly well-known as one of the most prominent of Kingston's retail jewelers, recently sold his irrigation system at Riverside, California, to a syndicate for \$1,000,000 cash, and still retains an interest in a large lot of land watered by the system. His many friends in the trade in Canada will be glad to hear of his good fortune.

E. BEETON, the well-known expert in horological matters, removed about a month ago from his old place of business opposite the post office, down to his new premises on Leader Lane, just south of King Street. Here he has much greater facilities than formerly for the prosecution of his business, and as a result says that he has all the work that he can possibly attend to.

FOR EUROPE, HO!—Mr. Abraham Levy, accompanied by his nephew, Mr. Adolph Levy, sailed for England via New York on April 12th. They expect to be gone about two months, and during their trip will visit the best markets for jewelry and kindred goods in Great Britain and on the Continent. Their customers may therefore look out for something nice in new goods for this fall's trade.

J A DOUGLAS & SON, of St. Catharines, one of the oldest and most respected retail jewelry houses in Ontario, assigned a few days ago to Sheriff Dawson. Twenty-five years ago no retail jewelry firm in Canada stood higher than did the house of Douglas & Co., but for some time past they have had a hard struggle to keep afloat, and finally had to succumb to the inevitable.

MERIT RECOGNIZED.—We learn from the *New York Jewelers' Catalogue* that Mr. P. J. Babcock, of Bates & Bacon's New York office, was honored last month by the Roseville (N. J.) Council, Royal Arcanum, of which he is a prominent member, by presenting him with a handsome Past Regent's jewel, in recognition of his active interest in the affairs of the Council, and for his zeal in obtaining new members.

THE LAST TURN.—As indicated in our last issue, the affairs of E J Schreck, jeweler, of St. Thomas, Ont., have apparently reached their termination so far as the jewelry business in Canada is concerned. After repeated failures, the business, which has of late years been run under his wife's name, has been closed out by the creditors, and the stock sold at 18½ cents on the dollar to P. Bertwistle, of London, Ont.

A REAL SURPRISE.—A wholesale firm in Hamilton, Ont., were agreeably surprised last month to receive \$1,500 from a customer who skipped out over seven years ago. Well, we should say so, as such occurrences are like angels' visits, few and far between. They say the firm above mentioned has ever since felt like the girl did when her lover gave her his first kiss. She wanted some more, and just in the same place.

COLUMBUS MOVEMENTS.—The striking advertisement of Harry Ellis, wholesale jeweler, of this city, which will be found on another page of this issue, will give our readers a pretty good idea of the variety and quality of the movements manufactured by the Columbus Watch Co. Mr. Ellis' wareroom on Wellington Street is headquarters for these desirable goods, and you are requested to make a mental note of the same.

MR. W. A. YOUNG, of London, Ont., general wholesale agent of the Dueber-Hampden watches, has, owing to the large increase in his business during the past few months, secured the services of his brother, who has for some years past been located in New York. W. A. says that he is now receiving orders from the best trade in all parts of

Canada, and no well-ordered retail stock is complete without an assortment of Dueber-Hampden watches.

W. F. DOLL'S NEW WAREHOUSE in Winnipeg is one of the largest and best jewelry stores in Canada, if not in America. It is eighty feet long by twenty-one feet wide, and the ground floor has a ceiling sixteen feet high. The main entrance is at the side, leaving a plate glass window of fifteen feet front. Mr. Doll is one of the most enterprising wholesale jewelers in Canada, and claims to carry a stock of goods equal to anything in the Dominion.

MR. JOHN W. CAMPBELL, well-known as one of the best jewelry travelers on the Eastern road as far down as the Maritime Provinces, has made an engagement with Messrs. J. E. Ellis & Co., the well-known retail jewelers of this city, to act as their head accountant for the current year. John W. is an old expert hand at this work, and the firm are to be congratulated on having secured the services of such an able and trustworthy gentleman.

H. H. FUDGER and wife sailed per Cunard Steamer "Umbria" for Europe last month, and expect to be absent until about midsummer. Mr. Fudger, who is President of the Goldsmiths' Stock Company of this city, will scour the English and European markets for novelties suitable for the jewelry business, and it will not be his fault if their customers do not have some choice goods to select from. We wish Mr. and Mrs. Fudger a safe and prosperous journey, and trust their health may be materially benefited by the change.

FOREIGN TRADE.—The Toronto Silver Plate Company are having phenomenal success in opening up trade with foreign countries, their latest addition being Buenos Ayres, South America. In spite of the fact that the gold premium there at present fluctuates between 110 and 140, the Company have succeeded in opening up a fairly satisfactory market for their productions, and this in the face of strong competition from the largest factories in the United States. This Company are doing a large home trade in special hotel goods, and amongst others they have in hand an order for the celebrated Windsor Hotel of Montreal.

TRADE REPAIR SHOP.—Mr. C. E. Billings, of London, has, as will be seen by our advertising columns, opened out a trade repair business in London on his own account. Our readers will remember Mr. Billings as the gentleman who won the second prize from all competitors in the *American Jewels* of Chicago, competition last year. His essay was published in *THE TRADER* a short time ago, and attracted a great deal of attention from the trade generally. Mr. Billings has the reputation of a workman thoroughly up in his business, and we bespeak for him a share of the patronage in this line that our readers have to dispense.

THE WALTHAM WATCH Co. last month disposed of their silver watch case business at Waltham to the Crescent Watch Case Co. of Brooklyn. This Company are erecting an immense new factory at Newark, N. J., and, when completed, it is their intention to consolidate their own filled, and the Waltham silver case business in the new premises, which will be one of the largest of its kind in the world. The reason the Waltham Company disposed of this business was that they required more room for the manufacture of movements. When the additional room thus obtained is occupied by the movement operatives, the Company calculate on turning out 2,500 complete movements every working day.

A SAD AFFAIR.—We learn from a Glencoe, Ont., despatch, that on April 10th, Parnell Crow, a little son of Mr. Alfred Crow, jeweler, of that town, was killed by the kick of a cow. Mrs. Crow had gone to the train to meet her mother, an aged lady who was expected home, leaving the little fellow sleeping and a little girl about twelve years old in charge of the house. The little fellow went out of the house unnoticed, and was found at the door of the stable in a dying condition, having been kicked on the head by a cow which was tied within. The child died soon after being found by his mother. Mr. Crow has the heartfelt sympathy of his fellow townsmen and of the trade in general in the sad affliction which has fallen upon his family.

A JEWELER INJURED.—While Mr. Henry White, of Frederickton, N. B., and his wife were engaged in cleaning furniture with benzine on the 9th of April, a lighted match caused the liquid to explode. Mr.



BUY THE BEST.

THE HAMPDEN WATCHES



EXCEL ALL

OTHERS



AS ACCURATE TIME-KEEPERS.

The Watch Movements manufactured by the Hampden Watch Co. are the best Movements made, and the guarantee on them is almost without limit.

CAUTION

We have found that it is almost impossible to have an Adjusted Watch reach the dealer in perfect condition when packed in Tin Boxes, and for this reason have gone to the expense of putting Skeleton Cases on all our Adjusted Watches. Since this was done, the Watches have made a most wonderful record for time, and their sale has increased three hundred per cent. during the past year.

We have also found that nine tenths of the so-called Watch Cases now manufactured by the Trust and sold under the various Dust-Proof and Anti-Magnetic names, are not turned true and therefore do not hold the Movement without binding somewhere on the Plates, which pressure on a Pillar Watch throws the Train out of upright and crowds the Top Plate in an opposite direction from the Pillar Plate, therefore causes the Pivots to stick in the Jewels, destroying the factory rating and the running of the Watch.

All Adjusted Watches in Skeleton Cases, please run without taking down, in order to ascertain if injured in shipment. If found perfect, they also ought to keep time as well when put in the Case. If not, the fault is with the Case.

Yours respectfully,

THE DUEBER WATCH CASE MFG. CO.

Address all orders to

WILLIAM ALLEN YOUNG,

Bank of Commerce Building,
LONDON, ONT.

Sole Canadian Wholesale Agent for the Sale of
HAMPDEN WATCHES.



WILLIAM ALLEN YOUNG,

Bank of Commerce Building, - - LONDON, ONT.

SOLE CANADIAN WHOLESALE AGENT

HAMPDEN WATCHES.

3 THREE NEW MOVEMENTS 3

18 SIZE HUNTING AND OPEN FACE.

"JOHN C. DUEBER." Nickel, 15 Ruby Jewels, in settings adjusted to heat and cold, sunk Seconds and Circle Dial, upright Arabic Figures and Seconds, Breguet Hair Spring, Compensation Balance, Patent Regulator. Specially guaranteed to be the best time-keeper in the world for the price, and superior to any other full plate Watch made outside of the Hampden Watch Factories.

"DUEBER." Nickel, 15 Ruby Jewels in settings, sunk Seconds and Circle Dial, upright Arabic Figures and Seconds, Breguet Hair Spring, Compensation Balance, Patent Regulator.

"THE DUEBER WATCH CO." Nickel, 11 Jewels in settings, Patent Regulator, Roman Circle Dial, Spade Hands.

NOTHING BETTER

MADE FOR THE

PRICE.



NOTHING BETTER

MADE FOR THE

PRICE.

Live Jewelers recognize the fact that the DUEBER-HAMPDEN WATCHES are the best time-keepers, and yield them greater satisfaction than any other Watch.

Write for Price List and Samples of above new Movements if you have not already placed order.

THE TRADE ONLY SUPPLIED.

BUY THE BEST, THE HAMPDEN WATCHES



THIS BOY HAS A
SERIES "E" WATERBURY

So you can bet he has the
CORRECT TIME.

The Lady will probably be around in the morn-
ing for a

SERIES "C" SHORT WIND.

HAVE YOU ANY IN STOCK?

THIS Gentleman is telling his neighbors how
pleased he is with his

"The Waterbury."

SERIES "J"

SHORT WIND WATERBURY

It Beats the World For Time, so he says,
so you can count on selling the
neighbors one sure.



YOU CANNOT AFFORD TO BE WITHOUT THEM IN STOCK.

SEND FOR CATALOGUE AND PRICE LIST TO

THE WATERBURY WATCH CO.,
81 KING STREET EAST, - - - TORONTO.



White was so badly burned about the face and arms that it is feared it will be a long time before he will be able to work again as usual. Mrs White and one of the children were severely burned, but not so badly as Mr. White was. The fire was promptly extinguished, but not before considerable damage was done to the room and its contents. Mr. White has the sympathy of the trade in Frederickton, where he is well and favorably known.

NO COMBINATION ON CASES.—At a meeting of the Canadian Jewelers' Association, held at Montreal, on the 24th of April, it was decided on account of the American case makers having withdrawn from cooperation with the Canadian Association, that all contracts on watch cases should be cancelled. American watch movements still remain, under contract however, exactly the same as before, and the rules of the Association will be strictly enforced regarding them. The Association intend issuing a new price list of watch movements only, as soon as it can be compiled and got out of the printer's hands.

A DECIDED CHANGE.—Messrs. P. W. Ellis & Co., finding their present quarters utterly inadequate for their fast increasing business, are now preparing plans for making extensive alterations in their present premises. The accountants' offices are to be moved upstairs to the first flat, and the whole of the ground floor devoted to the display of goods. The woodwork and decorations of this addition to their showroom will be in keeping with the old part of the ware room, and when completed will have a very handsome effect. The showroom will then extend clear through, from Wellington to Front Street without a break, and be one of the largest jewelry salesrooms on the continent.

CORRECTION.—Amongst our editorial notes in February's issue, we stated that Mr. A. O. Norton, wholesale jeweler of Coaticook, Quebec, had assigned for the benefit of his creditors. This item was based upon information, the accuracy of which we had at that time no reason to doubt, but we have since been informed that the statement was entirely incorrect, and that so far from Mr. Norton's having failed, he has always paid cash for the goods he bought, and is as solvent to-day as he ever was. This being the case, we regret exceedingly that we should unwittingly have fallen into the error of making any statement detrimental to his credit and standing, and have pleasure in giving this corrector, the same publicity in our columns as the original article.

The *Jewelers' Weekly* last month came to hand in a new and enlarged form, so much resembling *Harper's Weekly* in general get up, that we could hardly recognize it at the first glance. This change, while it is undoubtedly an improvement in many respects, considerably accentuates the difference between it and regular horological journals. The *Weekly* has always been more of a jewelry newspaper than a technical journal of horology, and as its enterprising proprietor has successfully acted the pioneer in that line, we are glad to see him making such advances to the goal of his ambition. The *Weekly* is one of the ablest and most enterprising of our exchanges, and we wish Brother Rothschild a long and prosperous career.

The *Jewelers' Guide* is the latest addition to Canadian literature, and apparently aims to "supply a long felt want" amongst the jewelry trade of Canada. While we cannot be expected to hail its advent with any great degree of enthusiasm, we desire for it the fairest of fair play, and that like THE TRADER it shall be judged strictly upon its merits. We do not believe that the jewelry trade of this country has any need for, or is disposed to support another trade journal, seeing that THE TRADER is sent free of charge to every jeweler in the Dominion of Canada from the Atlantic to the Pacific, and has so far filled the bill to the complete satisfaction of both its advertisers and the trade in general. However, we shall see what we shall see.

HOW FIGURES TELL THE TRUTH.—They say that figures can't lie, but if those given in the U. S. government returns for the exports of watches are not very wide of the truth we are lamentably mistaken. According to the *Keystone* the entire exports to all countries of watches and watch material for the year 1889, was \$310,334. That these figures convey an erroneous impression, to put it mildly, is evident from the fact that the export of these goods to Canada alone last year was \$162,263. In addition to this amount vast quantities of American watches are shipped to England, Australia and other countries, so it is safe to say that the amount shown by the government returns does not cover more than one-fourth of the watch exports of the United States.

LOOK OUT FOR HIM.—A new dodge in the way of swindling has just developed itself in West Toronto Junction, Ont. A sharp little Frenchman has been representing himself as the agent of a fashion journal, and calling on the milliners he would take their \$3 in advance for a year's subscription and a wire dress form, which has not yet arrived. Wherever he called he wanted to engrave monograms on watches, free of course, on condition that his goods would be recommended. A Miss Goodwin gave him a gold watch valued at \$50 besides the chain which was attached to it. He said he would run over to a hotel where his tools were and come back in a short time. Two days elapsed, and Miss Goodwin was still minus the watch, when enquiry at the hotels elicited the fact that the man had not been seen around at all. He is described as being dark and wearing little side whiskers and moustache. His receipts bore the name 'John Kelle, Montreal.' Our exchanges will please pass him around.

HOW THE MCKINLEY BILL will affect the American jewelry trade will be apparent from the following changes which are amongst its provisions: "All articles composed of precious metals or imitations thereof, not otherwise specially provided for, whether set with coral, jet or pearls or with diamonds, rubies, cameos or other precious stones or imitations thereof, or otherwise, and which shall be known commercially as "jewelry," and cameos in frames, *fifty per cent.* Pearls, forty per cent.; precious stones of all kinds, cut but not set, forty per cent., if set and not especially provided for by the law *fifty per cent.* Watches complete twenty-five per cent.; gold watches and cases, *forty per cent.* The additions to the *free list* include agates, unmanufactured, amber, unmanufactured, bort, and jewels to be used in the manufacture of watches; crude mother-of-pearl, platina in ingots, bars, sheets and wire." The protection afforded our manufacturers of jewelry and watch cases is modesty itself when put alongside of the above.

BUSINESS FAILURES OF THIS YEAR.—Mercantile failures throughout the United States as reported to Bradstreet's for the first quarter of the current year equal 3326 against 3569 for a like portion of last year, a decrease of 243. The details for the Dominion of Canada for three months of this year and last are as follows:

	Failures.		Actual Assets.		Liabilities	
	1890	1889	1890	1889	1890	1889
Ontario.....	275	304	\$1,027,664	\$1,069,741	\$2,151,626	\$2,159,726
Quebec.....	142	155	1,221,595	915,281	2,078,184	1,927,069
N. Brunswick.	19	20	29,155	19,946	66,260	129,815
Nova Scotia...	26	30	86,150	46,217	162,700	118,286
P. E. Island...	5	2	18,600	6,000	30,600	18,000
Newfoundland	1	3	300	19,000	100	44,000
Manitoba.....	25	16	138,908	45,950	282,175	19,800
N. W. T.....	6	2	52,837	16,000	86,832	20,000
B. Columbia..	3	4	8,580	45,400	14,300	81,000
	502	536	\$2,583,809	\$2,223,535	\$4,573,677	\$4,597,699

MORE PROTECTION.—The *Manufacturing Jeweler*, of Providence, R. I., in discussing the changes proposed by the McKinley Bill, says. The new tariff bill leaves the tariff on watches at twenty-five per cent, except on "gold watches and cases," which are placed at forty per cent. Of course the result will be, if the bill is passed as reported, that gold watches will come to this country in separate pieces, the movement by itself, on which there will be a tariff of only twenty-five per cent., and very few gold watch cases will come in at all, thus limiting the home market to the work of American casemakers. By the way, it is evident that the Committee on Ways and Means have not read the thrilling article in the *Jewelers' Circular*, to the effect that "a judicious modification of our tariff schedule would enormously increase our exports of watches. Or did they read 'exports' to mean 'imports.'" From all of which it would seem that American and Canadian case manufacturers as well as the governments of the respective countries, are pretty much of the same mind on this question.

WORTHY OF ATTENTION.—On account of the fraudulent entries made about a year ago through the medium of forged invoices, the Government last month added the following clause to the Customs' Act: "Any person who sends or brings into Canada, or who, being in Canada, has in his possession any bill heading or other paper appearing to be a heading or blank capable of being filled up and used as an invoice,



LEVY BROS.,

HAMILTON, ONT.

1890 - SPRING - 1890

Will soon be here, and the Public will look for Something New. Having a very large connection, which enables us to turn our Stock over rapidly and replenish it at short intervals, we can always show the Latest Goods made.

It would be useless to call attention to any Special Line. We claim to have a Stock Perfectly sorted in each Department, and can supply everything that a Watchmaker or Jeweler requires.

Our Travellers are now on the road, and due notice of their coming will be mailed to you. It will pay you to look carefully over our Stock. We will make it worth your while.



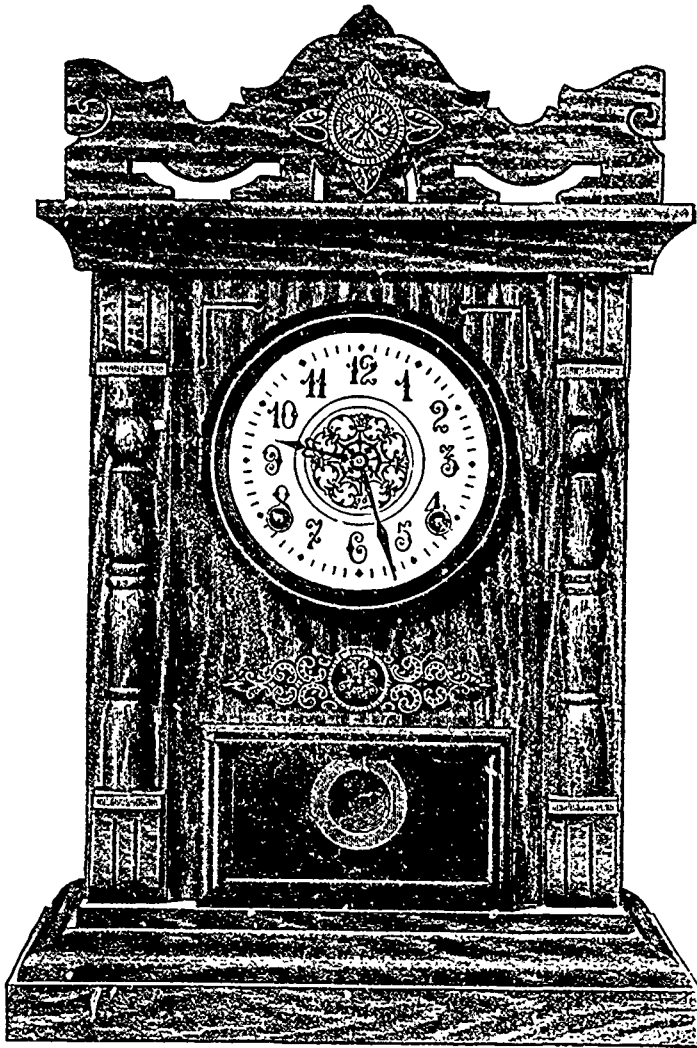
NEW HAVEN CLOCKS

A Large Stock on Hand.

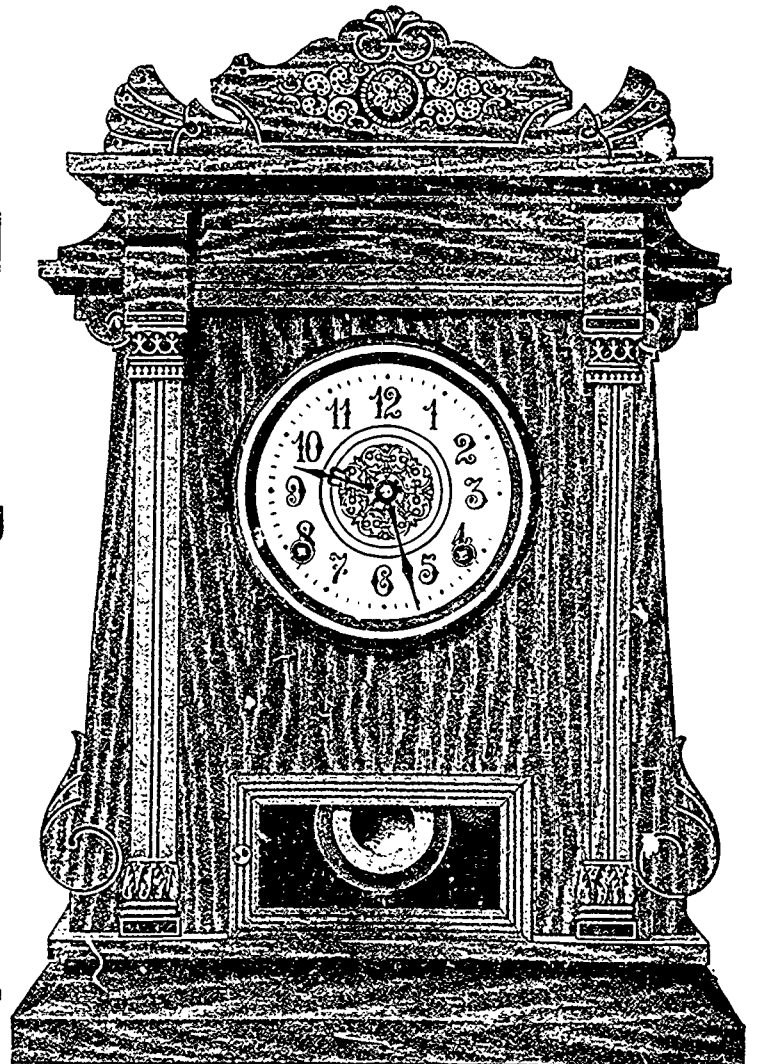
PRICES LOWER THAN EVER.

If you have an Order to Place,
Write us for Figures.

DESIGN! FINISH! PRICE!
UNEQUALLED.



RUSSIA—Height 18 1-2 in. Cathedral Gong.



SERVIA—Height 19 in. Cathedral Gong.

LEVY BROS.,

HAMILTON, ONT.,

SELLING AGENTS

FOR

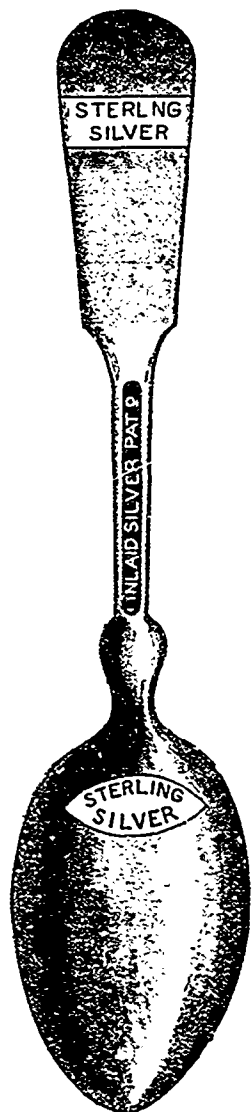
NEW HAVEN CLOCK CO.

FOR CANADA.



TO THE TRADE.

WE HAVE purchased the right to manufacture **INLAID SILVER SPOONS AND FORKS** in the Dominion of Canada, and are now placing these goods on the market. We wish to call your attention to the superiority of the **INLAID SILVER GOODS** over all other Spoons and Forks heretofore manufactured.



The accompanying cuts represent our Forks and Spoons before plating, which in process of manufacture have a portion of the metal cut out where they rest on the table, the cavity thus made being **FILLED WITH SOLID SILVER**. They are then plated with pure silver, 8 oz. plate, (twice the weight of silver deposited on the regular A 1 goods) and are the same in appearance as other plated ware, the filling not being visible. **THIS EFFECTUALLY OVERCOMES** the great objection that has always been found with plated Spoons and Forks. Even the "Sectional Plate" which has an extra coating of silver at the rest points will wear through long before the other parts having the lighter plate, the wear being so great at these points. Our goods are manufactured from 18 per cent. nickel-silver only, are plated with pure silver, and we **ABSOLUTELY WARRANT THEM TO WEAR 20 YEARS**. A guarantee is placed in each box. All our goods are done up in satin-lined rack boxes, containing one dozen. Every piece is stamped **INLAID SILVER, PAT'D**.



This class of goods has been on the United States market for the past two years, and has almost entirely superseded "A 1" and "Sectional" goods. The trifling extra cost makes "Inlaid Silver" fully 75 per cent. better value than the lines referred to.

Any dealer can sell, and confidently recommend them for all practical purposes equal to solid silver.

PRICE LIST.

TEA SPOONS,	Tipped and Windsor, \$ 6 50	Fancy Patterns, \$ 7 00
DESSERT SPOONS,	" " 11 00	" " 12 00
TABLE SPOONS,	" " 13 00	" " 14 00
DESSERT FORKS,	" " 11 00	" " 12 00
MEDIUM FORKS,	" " 13 00	" " 14 00

SUBJECT TO THE REGULAR TRADE DISCOUNT.

THE INLAID SILVER CO. - TORONTO, ONT.



and bearing any certificate purporting to show, or which may be used to show, that the invoice which may be made from such bill heading or blank is correct or authentic, shall be deemed guilty of a misdemeanor and liable to a penalty of five hundred dollars or to imprisonment to a term not exceeding twelve months, or both, in the discretion of the court, and the goods which may be entered under any invoice made from any such bill heading or blank shall be forfeited." Of course, there was the usual howl from the Opposition that it was simply a piece of legislation worthy of Russia, but in spite of such assertions the fact remains that no honest importer would stoop to secure blank foreign invoices or have imitations printed himself, for the purpose of making fraudulent entries and passing goods below cost in order to save on the duty. Such things have been done both in our own city and Montreal, and as such legislation is intended for the protection of law-abiding merchants who conform to the regulations, it is of assistance in protecting them against the devices of unscrupulous competitors.

CHEAPER WATCHES.—The surprise of the past month has been the reduction by the American Watch Case Company, of Toronto, of their "Nevada" silver screw case, and also their "Fortune" gold-filled screw case of the same pattern. These reductions, following as they do directly upon the heels of an increase of ten per cent. in the duty, should certainly convince the trade that an increased duty does not necessarily mean an increase in price to the people of this country. As a matter of fact the staple lines of watch cases are to day sold cheaper in Canada than they are in the United States, and this in spite of the fact that our home manufacturers have to pay the Government an average of at least ten cents of duty upon the imported material used in and for the manufacture of every case they make. The truth is that our protective policy has so stimulated manufacture in this line that we have too many factories for the limited market they have to supply. The result of this over-competition is cheaper goods than have ever been seen in this country before, and the consumer reaps an advantage corresponding with that lost by the manufacturer.

FAILURE OF THAYER & Co—One of the principal topics of conversation amongst the trade at present is the failure of Thayer & Co., the well known wholesale jewelers of this city, who assigned to Sherman E. Townsend on the 17th of last month. The cause of Thayer & Co.'s failure seems to have been a too reckless dispensing of credit; this added to the shrinkage of trade owing to the exceptionally dull winter through which we have just passed, caused the bank with which they did business to shut down on them, after which there was nothing left for them but to assign. The liabilities are \$38,590, made up as follows:—Merchandise indebtedness, \$14,500; preferred claims, \$6,090, and Bank of Commerce, \$18,000. The assets amount to \$20,000, and consist of stock, \$19,000, and book accounts, \$1,000. A meeting of the creditors has been called by the Assignee, when they will decide how the estate shall be disposed of. It is probable that Mr. Thayer will make an offer of settlement, if not the stock will in all likelihood be sold to the highest bidder. When the failure was first announced, it was expected by some that the forced settlement of the discounted notes held by the bank, would create a considerable inconvenience to the trade, but this has happily been in a great measure averted by the bank's consenting to give the makers ample time to liquidate them. As Thayer & Co., although not considered very strong financially, were thought to be doing a good business and making some money, their assignment has been considerable of a surprise to the trade generally.

CASES IN CANADA AND THE U. S.—The comparison of the prices of watch cases in Canada and the United States, which will be found in the advertisement of the American Watch Case Co., on page 36 of this issue, is worthy of more than a passing glance from the trade. Reference to the official jobbing price lists of the United States and Canada, will confirm the statements therein made that our Canadian retail jewelers are to-day buying these staple cases in Canada for less money than the American retail jewelers can purchase similar goods made in the United States. The members of Her Majesty's loyal (?) opposition in the House of Commons, at Ottawa, have for the past month been trying to persuade the Government and the public that the consumer paid the duty, and that under the iniquitous N. P. the public were not only mulcted on the imported goods they bought, but

on all the domestic goods as well. The Canadian manufacturers have been held up by them as a pack of robbers and extortioners, who had taken advantage of the high duty imposed upon imported goods to charge a helpless public every cent that a high tariff would allow them to fleece their victims out of. That this is certainly not true as regards watch cases is patent to every jeweler in Canada, who can show to Sir Richard Cartwright *et al.* that although under the boasted regime of the Reform Government the price of cases in Canada was the regular American price, plus the 17½ per cent. duty then levied, they are at present, under a protective tariff of 35 per cent., not only cheaper than they were in those revenue tariff days, but in nearly all the staple lines lower in price in Canada than they are in the United States. Sir Richard now has the floor, and if he wants any space in THE TRADER to prove the assertions he made on the floor of the House, we shall be only too glad to place our columns at his disposal.

Mr. JOHN E. EASSON of the Goldsmiths' Stock Co., of this City, has been promoted to the important position of traveller on the Northern, and Wellington, Grey & Bruce Railways. Mr. C. D. Maughan will hereafter look after the ordering, and supervise the other work of the house.

FROM OUR UNITED STATES EXCHANGES.

At the annual meeting of the stockholders of the Gorman Manufacturing Company, held at Providence, R. I., on Wednesday, March 12th, G. H. Houghton was unanimously elected agent of the Company.—*Masfr. Jeweler.*

An employee in the engraving department of the Keystone Watch Case Factory drew a \$15,000 prize in a lottery last month. Another employee got \$500. The factory employees had better quit now. Lightning's not likely to hit again in the same spot—especially lottery lightning.—*Keystone.*

Isaac A. Alling, the oldest manufacturing jeweler in Newark, N. J., suddenly died of heart failure at his home on April 12th. He retired from active business about January, 1889, after forty-eight years of faithful service to the various firms with which he was connected.—*Jewelers' Weekly.*

The ground has been staked off for the extension to the front wing of the Elgin factory, running south. In the vacant room in the factory, combined with this proposed addition, 700 new hands will be employed during the year. It is said that 1,200 additional hands would be put in immediately, if room could be found for them.—*Jewelers' Circular.*

The Pairpoint Manufacturing Co., of New Bedford, Mass., were so crowded for room last season, that they are now building an addition to their factory, about seventy feet in length and four stories in height. The hollow-handled, seamless knives, made under their patent, are becoming very popular with the trade, and the Company is abundantly satisfied with the outlook for the year.—*Jewelers' Circular.*

A very excellent substitute for an elevator in buildings, where there is no such convenience, is the contrivance utilized by Henry Goll & Co., 6 Liberty Place, New York. A speaking tube on the ground floor puts you in communication with the office up stairs, and if you have a package to deliver a satchel is lowered which conveys to the "Watch Case Sanitariums" whatever is wanted.—*Jewelers' Circular.*

S. T. J. Byam, ex-superintendent of the Trenton Watch Co., has accepted a position in the new Lancashire Watch Factory at Prescott, England, to supervise the introduction of American ideas in manufacturing watches. He returned last month from a flying trip to England, and ordered a large number of American watch making machines. He will return to England in a week or so.—*Jewelers' Circular.*

The Crescent Watch Case Co., finding their present factory in Brooklyn, N. Y., inadequate to the increasing demands of business, have purchased a large tract of land near Newark, N. J., upon which it is proposed to erect a factory, covering 13,000 square feet, and consisting of three stories and basement. A number of cottages for the heads of departments will be erected on the adjoining grounds. It is estimated that the new factory will cost about \$75,000.—*Jewelers' Circular.*

It is said that there are more shares held by employees of the Wa-



The Montreal Optical & Jewelry Co., Ltd.

Warehouse and Factory, 1685 Notre Dame St. Montreal.

P. O. BOX 1054.

ONLY MANUFACTURING OPTICIANS IN CANADA.

We are now offering to the Trade exceptional prices and the finest lines of all kinds of

OPTICAL GOODS

Ever Shown in the Dominion.

Andemair's celebrated Opera Glasses, Field Glasses, Telescopes, Spectacles

AND EYE GLASSES OF ALL KINDS, TRIAL LENS SETS, ETC.

Special care given to Prescription Trade and Customers' Repairs.

N.B.—Our Travellers are now on the road. Reserve your Orders for these Goods. It will pay you.

Montreal Optical and Jewelry Company, Limited.

The Best Line of Rolled Plate Chains.

IN THE MARKET FOR THE MONEY.

STYLES

ORIGINAL.
DURABILITY
GUARANTEED.

J.G.C.&CO.

FINISH ALL
THAT
COULD BE
DESIRED

(TRADE MARK)

Send for Illustrated Sheet of Specialties for this season. For Jobbers only.

J. G. CHEEVER & COMPANY Y,

NORTH ATTLEBOROUGH, MASS., U.S.A.

GEO. P. WAGNER.

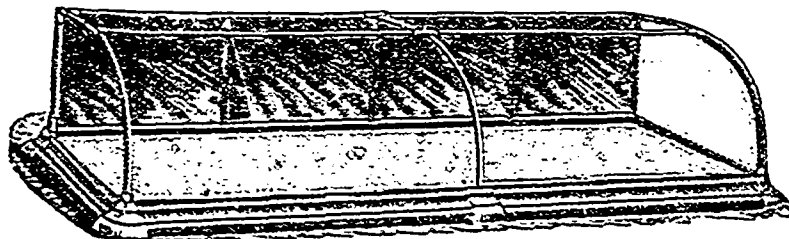
CARL ZEIDLER.

D. C. WAGNER.

DOMINION SHOW CASE WORKS, WAGNER, ZEIDLER & CO.

(FORMERLY DOMINION SHOW CASE CO.)

HIGHEST AWARDS RECEIVED WHEREVER EXHIBITED.



Manufacturers of

Show Cases of every description in Nickel, Silver
Walnut, Ebonized, etc.

Hardwood Store Fittings, Metal Sash Bars, etc.

Send for Catalogue and Price List.

Show Rooms, Head Office and Factory: West Toronto Junction, Ont.



Waltham Watch Company in the co-operative bank than by the employees of any corporation in the world in any similar institution. The amount paid by each month by the hands amounts to a number of thousand dollars, and not only that, a large number of the shareholders who work in the factory are borrowers, and hundreds of the neat cottages and double houses that have been put up during the past ten years in this city owe their erection to this excellent institution.—*Waltham Tribune*

The Elgin National Watch Co. are about to enlarge and thoroughly refit their general office, 76 and 78 Munroe street, Chicago. For the past year this Company have greatly needed more room in their Chicago office, and when these improvements are completed they will occupy fully one-half of the Munroe street front of the American Express building. We doubt if any company in the country have transacted so large and important a business in such modest quarters as those hitherto occupied by the Elgin Watch Co.—*Jewelers' Journal*.

A. J. Logan, Waltham, Mass., is getting out an improved beat block, provided with holes for the reception of the screws of a Swiss watch, which are almost certain to become mixed up, if they are thrown carelessly upon the bench. He has just shipped to England a large order of .001 inch jaw and depth gauges as a result of his advertisement in *The Circular*. So great is the demand for the improved 'Gem' screw driver with screw thread, that preparations are being made to turn them out in larger quantities. Among the recent improvements in his plant is a plating department, which will give him additional facilities for the prompt fulfillment of orders.—*Jewelers' Circular*.

The Waterbury Watch Co. has a factory it may well be proud of, and to give to the trade who have not had the pleasure of inspecting it an idea of its stately proportions and splendid interior equipment, the Company has prepared a large edition of handsome combination photographs of the factory building and the main departments into which it is divided. The main view occupies the centre, the interior views being grouped around it. The very elegant manner in which the picture is framed makes it a fit companion for the handsome photographic views of American watch factories with which so many of the jewelry offices and shops are now adorned.—*Jewelers' Circular*.



UNEXPECTED RIVALRY FOR THE CASE MOUNT TRADE.
TRAVELING CONFECTIONER: "Here ye are, boss! Pep'mint, wintergreen, an' sassyfrash. You eats off one, an' screws on another."—*The Judge*.

made is hardened and well-tempered steel, at least for the ratchet and click. The spring might as well be made of another metal of sufficient elasticity, but steel is generally preferred for the more striking appearance which its polished surface gives to the movement. The form of the ratchet tooth is not indifferent. It requires a greater strength if its back is made a trifle convex instead of quite straight. At the same time, the acting extremity of the click is weakened; but this is, in case of wear, much easier to mend or replace. The acting straight side of the ratchet tooth ought to be a little undercut, and a sharp and clear angle at the ground is of importance, in order that the resistance to the strain may be uniformly supported by the whole acting face of the tooth. The durability and good service of the clickwork depends mainly on the good execution of these particulars. It is also very important that the straight line drawn from the centre of motion of the click to its acting point be a tangent to the circumference of the ratchet, or what would be the same, that it stands at right angle to the radius of the ratchet at the point of action. In case of a deviation from this right angle, it must be inward—that is, the angle must be obtuse, if the click is so arranged that it is pushed back by the action. If the click acts in a tractional way, the angle can be sharp.

WISE AND OTHERWISE.

SOME girls are pressed for time and others for the fun of it.

TAILORS say that a fast man is generally pretty slow about paying up.

A WASHERWOMAN'S work has but just begun when she is approaching the clothes.

OTHER identification needed.—"What name please?" "Smith." "Dear me! How indefinite!"

"YES," said Fogg, "as a success I have always been a failure, but as a failure I have been an unqualified success."

THE only thing that really interests the average hired man is something that he is not paid for attending to.

STRANGE but true.—John Doe—Are you carrying a mortgage on your house? Richard Roe—Yes, and strange to say, I'm carrying it because I can't lift it.

"CAN you show me the grub that makes the butterfly?" she enquired sweetly. "Buckwheat's the grub but t'ain't in season" answered the horrid, ignorant farmer.

IT is curious that when carpenters strike, not the sound of a hammer is heard.

The milk of human kindness
Is like other milk in form,
For it will quickly sour
At the gathering of a storm.

A New York editor is trying to decide which is proper, "I saw an opera," "or I heard an opera." If he sat behind the regulation size bonnet the latter term is correct.

"WILLIE, how did you get along in school?" "Badly, papa, the teacher gave me a thrashing." "Why?" "Well, he asked me how many teeth a man had, and I said a whole mouth full."

Be good sweet maid, and let who will be clever,
Do noble things, not dream them all day long
And so make life, death and that vast forever
One grand, sweet song.

GENUINE pity.—Officer—"Well, Anton, how's your master to day?" Orderly—"Poor, dear captain, he's no better yet. Wanted just now to shy his boot at my head, but hadn't the strength to do it!"

WORKSHOP NOTES.

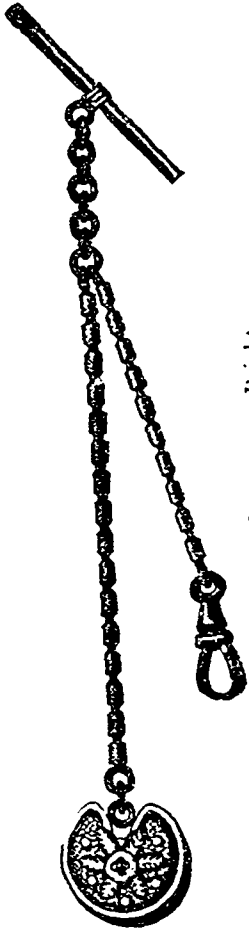
RELIABLE CEMENT.—A reliable cement—one that will resist the action of water and acids, especially acetic acid—is composed of. Finely powdered litharge, fine, dry, white sand and plaster-of-Paris, each three quarts by measure, finely pulverized resin, one quart. Mix and make into a paste with boiled linseed oil, to which a little drier has been added, and let it stand for four or five hours before using. After fifteen hours standing it loses strength. This cement is said to have been successfully used in the Zoological Gardens, London.

RING STICK.—A considerable misapprehension exists in the matter of measuring a ring on a gauge, we would say that the edge of the ring should come as far as the mark, while some contend that the mark on the stick should come inside the ring. This is not right, because any ring properly made is of the same size at the centre as it is at the edges, and the ring stick is made tapering, so that when the edge of the ring is pushed up as far as it will go, the centre of the ring will necessarily stand off from the stick. In a narrow ring this would make little difference, but in a wide ring it amounts to something.

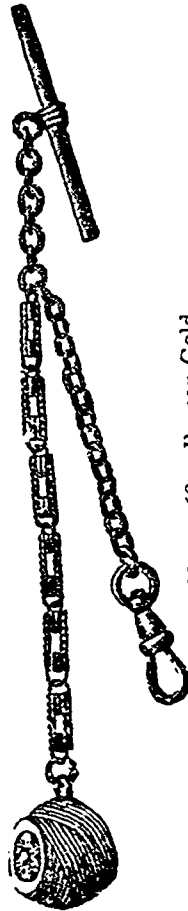
THE CLICKWORK.—The material of which the clickwork ought to be



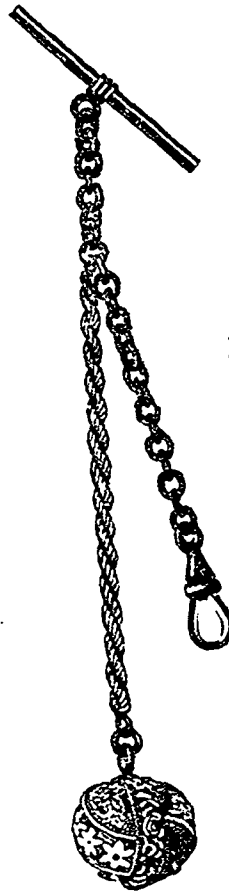
R. F. S. & CO. "SAFETY QUEEN."



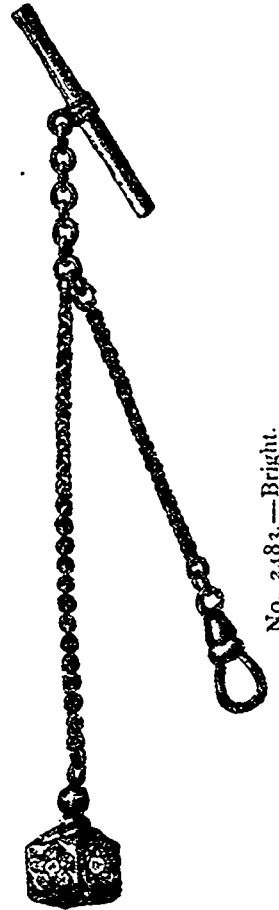
No. 2520.—Bright.



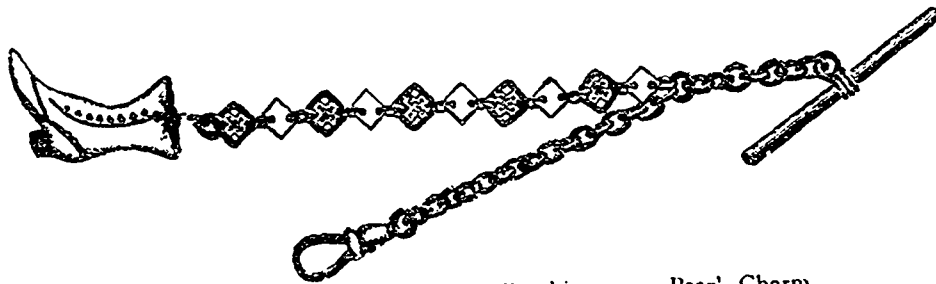
No. 2468.—Roman Gold.



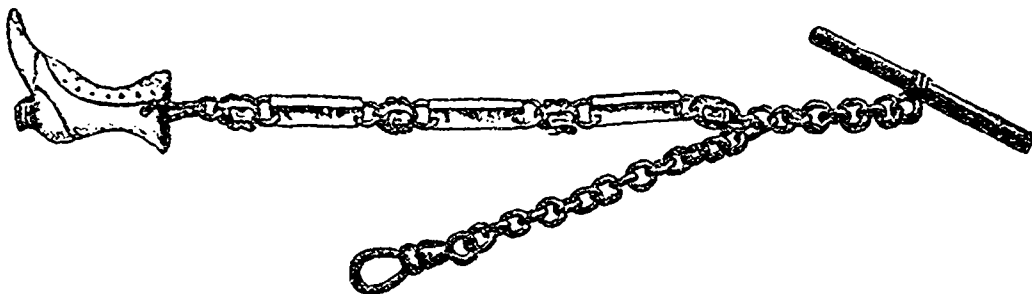
No. 2490.—Bright.



No. 2483.—Bright.



No. 2497.—Pearl and Gold Combination. Pearl Charm.



No. 2500.—Pearl and Gold Combination Pearl Charm.



OTHER NOTES.

EMIN Pasha now speaks twenty-seven different languages and dialects.

THERE is very little warmth in the mitten which the rejected lover receives.

THE Jewish population of Palestine has increased 10,000 annually in the last five years. In 1741 Palestine contained but 5,000 Jews, in 1883, 20,000; end of 1888, 70,000.

"WHO is that who wants to see me?" asked a very busy merchant of his servant. "I don't know his name, but he says he was an old friend of your father's." "All right; you tell him that I am very sorry but my father is dead."

THE alarm girdle for men-of-war or harbors, to protect them from the sudden attack of torpedo boats at night, as proposed for use in France, consists of wire supported by buoys placed at intervals all around the vessel. Should an enemy break through the line at night a light flares up and discloses his position.

A SYSTEMATIC elevator man has pasted up a lot of rules to make his own life more worthy of living. This is one—"Don't stand on the outside talking to a friend who may be inside the car. The elevator man does not like to close the elevator door in your face."

SCIENTISTS say that the duration of a lightning flash is not infinitesimal, but that the flash lasts a measured time. For example, if one sets a camera in rapid vibration and exposes it in a plate so as to receive the impression of the flash, it is found that the impressions appear widened out on the negative, showing the negative to have moved during the time the flash was in existence.

OUR HELP COLUMN.

THE TRADER aims to be of practical value to the Retail Jewelry Trade. NO CHARGE is therefore made for advertising in this column, but the subject-matter should not exceed five type lines, or about 60 words.

A SITUATION as Watchmaker, etc. Has six years' experience, have an American and Universal Lathe, and all small tools necessary, good workman. Can give best of references. Address Drawer "G," Clinton, Ont.

A YOUNG MAN, with twelve years' experience as working jeweler, would like to obtain a situation as such, or would like to hear of anyone having tools to dispose of (second-hand). Address, P. J. T., 19 Bellevue Place, Toronto, Ont.

CHEAP FOR CASH—Watchmaker's American Lathe, nickled, in good order, chucks and pivot polisher. S. T. VANSTONE, Palmerston, Ont.

FIRST CLASS TRAVELLER WANTED to sell watches and jewelry in the Province of Ontario. Apply to Box 595, TRADER PUB. Co., Toronto.

FOR SALE—Ship's chronometers, \$40.00 to \$75.00, cost twice as much. Owned by a shipping firm who have no further use for them. Apply E. W. TAYLOR, Charlottetown, P. E. I.

FOR SALE—Spencer's Ophthalmoscopic Test Lenses, by Dr Bucklin in good order. Cost \$35.00, will sell for \$20.00. E. W. TAYLOR Charlottetown, P. E. I.

FOR SALE—A small and well assorted stock of Watches, Clocks, Jewelry, Tools and Material, in good manufacturing town, value about one thousand dollars, but would reduce amount to suit purchaser. Good chance for young man. Good reasons for selling. Address B J., care TRADER PUB. Co., Toronto

JEWELRY TRAVELLER wanted, to travel west to the Pacific Coast. Apply stating terms, experience and references to Box 178, Winnipeg, Man.

JEWELRY BUSINESS for sale in the Village of Madoc. Stock and fixtures about \$2,500. Stock will be reduced if required. Shop is especially fitted for the business. Do not apply unless you mean business. For particulars address E. L. WEISS, Madoc, Ont.

JEWELRY, Fancy Goods and Stationery Business in Toronto, doing a good trade, at a dead bargain. Rent very low. Telegraph Office in connection that pays rent of store. Stock about \$1,500. Big snap. Party leaving the city. Address, 312 Queen St., Toronto.

SITUATION as Watchmaker. Two years' experience at bench work and used to waiting at the counter. Best references. Address, G. W. ELLIOTT, Mitchell, Ont.

SITUATION WANTED—By a young man 22 years old to finish trade. Have had one year's experience. Can do common watch, clock and jewelry repairing. Speaks English and French. Good references. Address, E. I. G., Box 102, Nicolet P. Q.

SITUATION WANTED.—By watchmaker with nearly five years City experience in first-class shop. Has complete kit of tools, including American lathe. Can furnish best references. Address, B I Z., care TRADER PUB. Co., Toronto.

TRAVELLER open for a position. A connection from the Atlantic to the Pacific. References unquestionable. Address Box XX, care TRADER PUB. Co., Toronto.

TRAVELLING SITUATION wanted by a practical Jeweler of ten years' experience in retail jewelry business, to represent a reliable jewelry firm. A salesman. Best of references as to character and ability. Address ENERGY, care TRADER PUB. Co., Toronto

WATCHMAKER WANTED.—Must be first-class with best recommendations, one who speaks French preferred. Apply, stating wages required, experience, references, etc., to Box 77, care TRADER PUB. Co., Toronto.

WANTED, WATCHMAKER, two or three years' experience, used to serving behind counter. Mention wages and references. Box 95, Mitchell.

WATCHMAKER wants a situation, has had thirteen years' experience. A references and of good habits; also good kit of tools. Address Box 148, Guelph, Ont.

WATCHMAKER and Jeweler wants situation. Five years' experience. Good workman, low wages asked, A references given, city preferred. Address JEWELER, Box 404, Brantford, Ont.

Watch Repairing for the Trade.

Unexceptional facilities for the production of the highest class of work at the lowest possible price.

Don't be bothered waiting a week for your work when you can have it returned 24 hours after receipt, by sending it to

C. E. BILLINGS, 208 Dundas St., LONDON, ONT.

SEND FOR PRICE LIST.

JEWELERS WANTED,

TO SEND THEIR ENGRAVING TO

J. S. MURRAY & CO.

GENERAL AND ORNAMENTAL

ENGRAVERS,

ROOM 58,

YONGE STREET ARCADE, - TORONTO.



A black and white illustration of a man in a suit and hat, holding a large diamond ring and a scroll. The ring is oversized and features a large diamond on top. The man is looking towards the viewer. The scroll he holds contains text about jewelry specialties.

OUR SPECIALTIES:
AMERICAN AND SWISS
WATCHES.
DIAMOND AND GEM
RINGS.
AMERICAN JEWELRY.
WATCH MATERIALS.

A. G. ANDERSON & Co.
WELLINGTON 16 ST EAST
WHOLESALE JEWELLERS TORONTO

ASSIGNEE'S SALE.

TENDERS will be received at a rate on the Dollar by the undersigned Assignee of the Estate of J. Douglas & Co., of St Catharines, Jewelers, up to noon of Monday, the 12th day of May, 1890, for the purchase en bloc of the stock and shop fixtures of the above estate as follows :

Clocks, - - - - -	\$ 431 03	Large Fire and Burglar Proof Safe (Taylor)	\$ 750 00
Plush Goods, - - - - -	78 98	1 Large Nickel Show Case, - - - - -	250 00
Fancy Goods, - - - - -	982 76	8 Nickel Show Cases, - - - - -	195 00
Spectacles, Etc., - - - - -	173 48	Walnut Side Show Cases, Mirrors, Fittings, Etc.,	538 50
Silverware, - - - - -	509 08		
Jewelry, - - - - -	1,581 06		\$5,642 48
Jewelry Boxes, Etc., - - - - -	152 57		

Inventory and stock can be seen on application.

TERMS :—Ten per cent. on acceptance of tender, balance to be paid on transfer of stock.

No tender necessarily accepted.

T. C. DAWSON,

ASSIGNEE,

ST. CATHARINES, ONT.

Dated 25th April, 1890.

T. WHITE & SON,
MANUFACTURING JEWELERS,
 LAPIDARIES & DIAMOND SETTERS,
RICHMOND CHAMBERS, RICHMOND ST. WEST, TORONTO.

Canadian and Foreign Stones Polished and Mounted for the Trade.
 N.B.—A variety of Stones and Imitations of all kinds in Stock.

C. W. COLEMAN,

10 KING ST. WEST, (up Stairs,) - - - TORONTO.

WATCHMAKER TO THE TRADE.

Importer and Dealer in GRANDFATHER CLOCKS,
 QUARTER TING-TANG AND CHIMES.
 ESTIMATES FURNISHED FOR TOWER CLOCKS.

W. COATES & BRO.,

JOBBERS IN

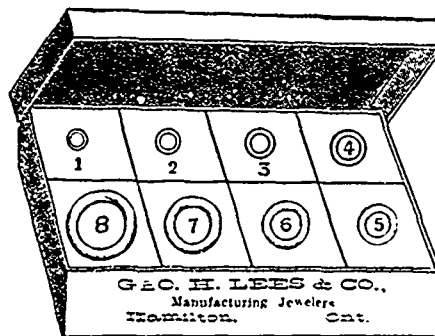
JEWELRY AND WATCHES,

BROCKVILLE, ONT.

G. H. LEES.

WM. LEES.

G. H. LEES & CO.



Rolled Plate and Silver Jump Rings at less than half ever sold before, conveniently done up in boxes holding one gross each, in 8 assorted useful sizes as per illustration.

R. P., - - - \$1.25 per Gross.
 SILVER, - - - \$1.50 per Gross.

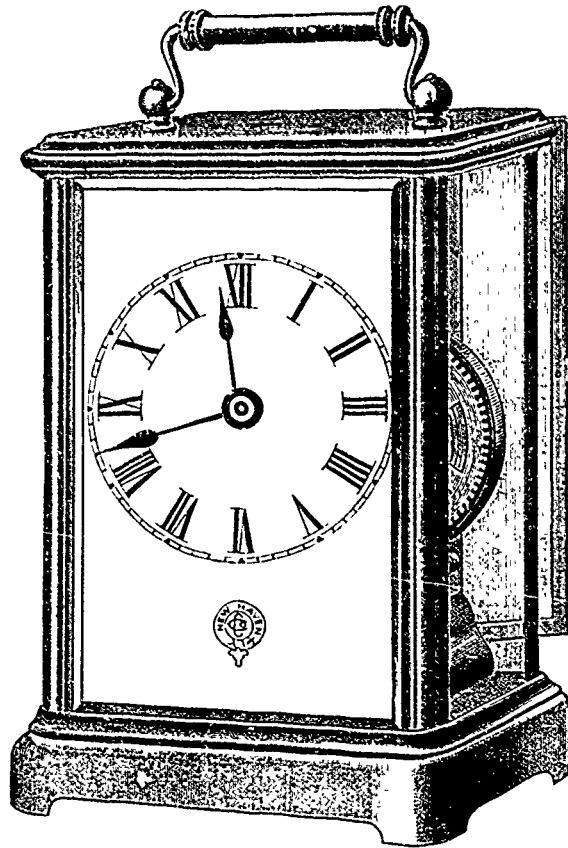
Sent by Mail on receipt of Price. Try a box of each.

G. H. LEES & CO.,
HAMILTON, ONT.

N. B.—If you haven't tried our Bangle Bracklets as advertised in April TRADER, do so at once They are good Sellers. Solid Silver, \$2.10 per dozen.



THE PILGRIM



IS the best Nickel 1 Day Half Hour Striking Clock made. It is striking in appearance, is an accurate time-keeper, and one of the best sellers in the market. It is also made with Gilt Mat Dial.

The names we want to bring before our patrons this month are - CABINET, No. 6; CABINET, No. 4; CABINET, No. 7; CABINET, No. 3. These we are selling at a

GREAT REDUCTION

In price, and they are without doubt the best value in the market.

Etruria, Umbria, Servia, Gallia, Hidalgo and Valkyrie have not been surpassed, and are still leaders this Spring. These Clocks are made by the famous New Haven Clock Company, of which we are Agents.

E. & A. GUNTHER, - TORONTO.

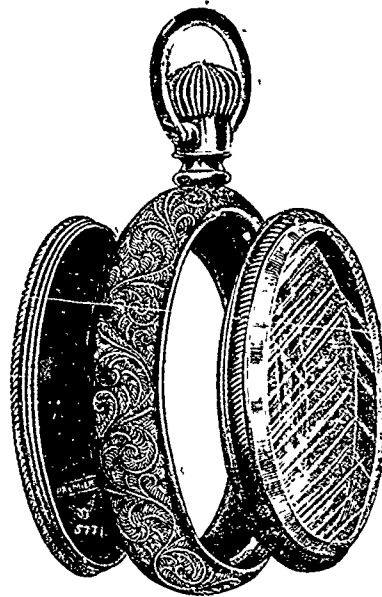


A CASE YOU CAN SWEAR BY



THE great Showman, PHINEAS T. BARNUM, says that "the public like to be humbugged." Whether this be correct or not, it is undoubtedly true that there is a great deal of humbug during the present age, and that in no branch of business is it more apparent than in the manufacture of GOLD FILLED WATCH CASES.

It is a notorious fact that cheap so called filled Cases are being sold by unscrupulous manufacturers, and guaranteed to wear from 15 to 20 years, that have hardly gold enough on them to swear by. The retail trade purchase them in good faith, and sell them with the idea that the warranty means just what it says, and will be lived up to by the manufacturers. Such goods cannot possibly wear as guaranteed, and are bound in the end to bring loss of both money and reputation to every person handling them.



The Patent Screw Dust-Proof Case Manufactured by the American Watch Case Company of Toronto, has been upon the Canadian Market for nearly two years. No Case ever received a heartier reception, and the fact that its sales are larger to-day than they ever were before, is proof positive that it has filled "a long long felt want," viz., a first-class case, honest in every particular, at a low price.

Hitherto their Screw Dust-Proof Case has been made only in Gold, Silver and Silveroid, but in response to the generally expressed request of the trade in all parts of the Dominion, the Company have placed upon the market a 14 K. Gold Filled Case of this kind.

It is almost needless to say that in placing a Gold Filled Case upon the market, the American Watch Case Company have taken pains to make sure that it is not only perfect in design and finish, but especially that it should be thoroughly reliable as regards its wearing qualities.

Their 14 K. Gold Filled Screw Case has a Solid Gold Bow, extra thickness of gold plate, and comes up to this standard in every particular. Each Case is stamped with the word "PREMIER," and bears the Company's registered trade mark of a "WINGED WHEEL." A guarantee for 21 years accompanies every Case, a fac simile of which is given above, and this warranty the Company proposes fully to maintain, no matter by whom the goods are sold.

The American Watch Case Company's Patent Screw Dust-Proof Case can now be had from all the leading Jobbers, in Gold, Gold Filled, Silver, Silver Filled, and Silveroid. They are the best and cheapest Cases in the market, and as you can make more money out of them than any other, you will find it to your advantage to handle them. Sell only cases you can swear by."



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