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THE TRADER.

TORONTO, ONTARIO, MARCH, 1882

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

Advertising Rates.

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 No. 13 Adelaide Street East, Toronto, Ont.

Editorial.

NO INSOLVENT ACT.

It is now quite evident that the Government has no intention, this session at least, of bringing in a new Insolvent Act.

So far, the country has been in a highly prosperous condition, and the want of such an Act has not been seriously felt, but just as soon as a reaction sets in and we again feel the stringency of hard times it will be found that the present chaotic state of affairs will not answer.

At present the want of an Insolvent Act has a tendency to curtail credit amongst wholesale dealers, and in that way, it may not be altogether an unmixed evil, but while it has a tendency to make our wholesale merchants look more sharply after their customers, it also has the effect of curtailing our national credit abroad. We have before pointed out that the effect of the want of an Act compelling the fair division of a debtor's estate has impaired our credit in the English markets, for the simple reason that creditors so far away must always be at a great disadvantage as compared with creditors close at hand, especially when the law, or rather the want of it, allows the first come to be served in full no matter whether the others get anything or not.

We say that although this state of affairs cannot last long, the absence of an Insolvent Act may not be altogether an unmixed evil. If it makes dealers more careful in buying, and warns them that it is not so easy to get whitewashed as it formerly was under the old law, it will have served a good purpose, but sooner or later we think that Government will be compelled by public opinion to bring

forward a thorough and comprehensive Insolvent Act that will put a stop at once and forever to the legal tripping and sharp practice that is now resorted to by debtor and creditors alike.

A MYSTERY.

Every one at all acquainted with trade knows that there is a great deal of smuggling carried on between the United States and Canada; that the smuggling exists solely on account of the high tariff imposed by the Government, and that it cannot be stopped unless the duties are lowered or entirely done away with. A very pertinent proof as to the extent to which this practice is carried on in American goods coming into Canada, may be found in a comparison between our statement of the goods we import from the States and their statement of the amount of goods they sell to us. Tabulated the figures stand thus:—

Canadian imports of American goods for the year ending 30th June, 1881—

American Export figures.....\$89,512,876
 Canadian Import " 86,704,112

Discrepancy, \$2,808,764

There are three possible explanations of this discrepancy. (1.) That the Minister of Finance, for political effect, has discounted and thus reduced the amount of our American imports in order to show a favorable balance in support of the National Policy theory. (2.) That this discrepancy represents the difference between the actual price at which the goods were purchased and the price at which they were entered for duty; in other words, it shows how much dishonest importers have cheated the Government out of by means of false invoices. (3.) That this discrepancy represents the amount of goods smuggled into the country.

The first explanation we dismiss at once as being only offered for political effect and unworthy of Canadian statesmen.

As for the second, while it is certain that this discrepancy covers the amount of goods that are passed in by way of false invoices, yet we are glad to think that this custom is not general and that the amount is comparatively small. We are inclined to think that fully two millions of this discrepancy is caused by smuggling, and that the full amount is made up by the goods smuggled and the goods passed in by false invoices. After

a careful investigation of the subject this is the only conclusion we can arrive at, and it goes to prove what we have already advanced, that on small and valuable goods the duty should be lowered so as to take away the incentive to smuggle.

If this principle were kept in view and acted upon by the Government, we are satisfied that smuggling would be much more rare than it now is, and that the amount of duty collected would be greater than at present.

ANOTHER WARNING.

In our October number we drew the attention of the trade in general, and the Jewelry trade in particular, to the folly of trusting valuables to the keeping of key-locking safes.

Our remarks at that time were inspired by the fact that only a few days previously, a Toronto jewelry firm had, from this very defect, been robbed of over \$8,000 worth of goods, which, up to this time, have not been recovered or even traced. In the article in question we pointed out the weakness of key-locking safes and warned our readers not to put any faith in them, no matter how complicated and safe they may appear to the uninitiated.

We are glad to know that in some quarters our warning was productive of good and that the old key-locking safes were replaced by something more modern and reliable.

We are only sorry that our advice was not followed in all cases where such protection was in use. Had it been, the present article would probably never have been written, and the victims of the "gentlemanly burglar" would still have been in possession of much valuable property.

The robbery in question was that of Messrs. W. C. Fox & Co., jewelers, 129 King Street East, of this city, who, by reason of this very defect of their safes were robbed of over \$8,000 worth of goods. As a full account of the robbery will be found in another column, we will simply say here, that the robbery would hardly have been attempted had the goods been protected by first-class safes.

The store had every other protection—lighted gas, private watchman, policemen passing continually, and even a family firing overhead, but in spite of all these precautions, the burglars appear to have secured their booty not only without any difficulty, but without leaving

any trace wheroby they may be detected, or the goods recovered. It seems that each of the proprietors carried keys of the safe, one to fit each lock, and that their keys were never out of their possession. Moreover, these keys were of such peculiar construction as to make their owners believe that their safes were absolutely burglar-proof.

This probably was the case, and had the burglars been compelled to force the safe open, it is more than probable that they would either never have made the attempt, or else have been detected before they could have completed the job.

The detectives, as usual, have nothing to advance but theories, but their theory seems, at all events, to be a sound one this time, although it will afford but little satisfaction to Messrs. Fox & Co. to know that the robbers probably visited their residence and secured and took wax impressions of their keys while they were asleep. We say that this is the most probable explanation of the remarkable case with which they executed this robbery, for it was almost precisely in a similar manner that they obtained the keys of Messrs. Welsh & Trowern's safe for the September robbery.

It is quite evident, from this and various other robberies of a similar kind, that key-locking safes, however perfect their locks, are entirely worthless in the face of such an operation as detailed above, and the only safe way of keeping valuables is to secure the safes in which they are stored by combination locks.

Even these, as we have before pointed out, are not absolutely burglar-proof, but they at least do away with more than half the risk. The balance may be minimised by keeping the store well lighted up at night and an honest and vigilant watchman to look after it.

Good safes are now so cheap that any merchant who trusts to the old-fashioned ones on account of the expense is penny wise and pound foolish. The slight additional expense involved in procuring the modern improvements is more than compensated for by the increased protection secured and the peace of mind resulting from the knowledge that everything has been done that can be done to secure safety.

To any of our readers who have not yet discarded their key-locking safes we would say, don't trust to them any longer than it will take you to get a new and modern safe in their place.

The losses we have chronicled should be sufficient warning, and a word to the wise is sufficient.

ARE YOU INSURED ?

Probably no subject, in these days of destructive conflagrations, is more important than that of adequate fire insurance, and we are sorry to say that in many cases it receives but a very small portion of the consideration due to its importance. While to the thoroughly trained business man, adequate fire insurance is a necessary adjunct of his business, to the untrained and unthinking, it is an unprofitable expenditure of money that is made more often at the solicitation of the insurance agent, than for any conviction of its practical necessity.

No greater error than this could be practiced by any business man, for facts which can scarcely be contradicted, furnish abundant evidence that fires will occur in spite of the greatest possible precautions to prevent them. This being the case, it becomes the imperative duty of every business man to guard against possible loss from this source by adequate insurance in some responsible company, and the refusal or neglect to provide against such a contingency is not unfrequently attended with serious loss to the creditors, and utter ruin to the merchant whose conduct has made such a thing possible.

Probably every one of us can call to mind instances of merchants who have been reduced from independence to poverty by their failure to comply with this very important business requirement; and the wonder is that with so many warnings before their eyes, there are any merchants to be found blind enough to stand in their own light and thus deliberately run the risk of commercial shipwreck.

We submit that this question of adequate fire insurance is one of the most important that can engage the attention of any business man, either wholesale or retail.

It is not enough to be insured, for a merchant may be that, and still in a position to be ruined by a general burn out. What is wanted, is for each merchant to have an insurance commensurate with the amount of stock he carries, so that in case of a sweeping fire, he will not be crippled, ruined entirely. So necessary has adequate fire insurance become that we find it has become a general custom among many of our largest and wealthiest wholesale merchants to increase their insurance day by day for short date policy during their season of large imports, deeming it too great a risk to allow their ordinary amount of insurance to

stand against their increased stock, even though the danger be only for a few days or weeks at the most. If the wealthiest cannot afford to become their own underwriters, by running unnecessary risks, it stands to reason that to the average business man adequate insurance is a matter of vital importance, and should be delayed no longer than it takes to find out the amount of stock and get the policy properly executed.

A very important factor in the question of fire insurance, is the standing and reliability of the company insured in. Many people run away with the mistaken notion that any Insurance Company is good enough, and if they are insured at all they are safe enough. There never was a more absurd idea, and as a rule this class of insurers get into small Mutual Companies, with little capital, less responsibility and no disposition to pay, and the result is that when loss by fire does occur they are unable to get a single dollar from the company, who will raise any and every possible legal quibble in order to get rid of paying the claim.

Competition in the insurance business is so keen that there is but little difference between the rates of reliable and irresponsible companies, and what little there is, is more than counterbalanced by the additional risk the insurer runs.

As a rule cheap insurance, means unsafe and risky insurance, and is dear at any price.

We cannot better conclude than by giving our readers the advice we gave them nearly three years ago, advice which we sincerely trust will be followed by any who have neglected this very important question.

Always keep your stock and property insured.

See that it is insured in some first class company that has a reputation for honorable dealing.

Read your policy carefully and see that you comply faithfully with its requirements.

If you insure in more than one company see that your policies are made concurrent, and not each company allowed to insure a particular kind or quantity of goods.

There being so very little difference between the rates of strong and weak insurance companies, it will pay you to have the best if it does cost you a trifle more; it is a great advantage to be in a company that is financially strong.

Selected Matter.

ODD TASTE IN JEWELRY.

"Here is something new in the way of ornamentation," a salesman in a large up-town jewelry store said, opening a box and exhibiting a monster beetle four inches in length. About its body was a solid gold band, locked by a tiny gold padlock, to which was attached a costly gold chain, about two inches in length, fastened to a pin. The beetle's back glistened in the light, having been treated to a dress of gold, and as it lumbered along its legs worked in a curious fashion. "It's a shawl pin. You see the pin is used to fasten lace or a shawl, or perhaps worn on the bonnet, the insect crawling around the length of the chain. They are perfectly harmless and not expensive, as they live on hair—that is, they have never been seen to eat. This one was brought here to mount, which is a very fine operation, as the legs and antennae are all so delicate. After all, there is nothing objectional about them, except the idea of having them crawl over you. They all come from South America and the only lot now in the city is to be taken to France, where the owner will try to introduce the fashion of wearing them. They cost from ten to fifty dollars, depending entirely upon the mounting of the ring. There is nothing cruel about it, as they are bound loosely, and the gold has no effect upon their hard sides."

In Brazil the fashion of wearing beetles is carried to a great extent. A well known resident has a beetle with a collar of gold which meets at the top, and is there ornamented with a diamond of great value. The insect has a cage, surrounded by the plants among which it lives in its native state, and nothing is neglected to make it as comfortable as possible. But the most popular insect used for an ornament in Brazil is a small phosphorescent beetle. These are often worn fastened in the hair, and as the two phosphorescent or life-giving spots are on the sides of the head, the black insect is, of course, invisible when in the raven locks of the fair Brazilians. Twenty or thirty of these beetles will throw out a light sufficient to read by, and when arranged around the head in a circle or grouped over the forehead and held in place, the effect is beautiful.

Several years ago a New York lady gave a masquerade ball at her summer house in Newport. The dancing was on

the lawn, and the guests were requested to be there half an hour before dark. The hostess wore the costume of night, and in daylight her black dress, covered with ivy leaves, did not attract special attention, but when she appeared in the gay throng after dark she presented a perfect blaze of light, and was the centre of the admiring and wondering company. Tremulous waves of reddish-yellow flame seemed to move over her entire dress while in a cap on her head gleamed one great fiery star. The cause of this illumination was the phosphorescent light of more than five thousand fire flies. For weeks previous to the ball the designer of the costume had been steering away fire flies, and on the day of the fete they were rapidly put on the dress. As the light-giving spot is on the ventral surface, each one was placed on its back held down by a fine silver wire, so skilfully caught that it could not turn over or escape, and was injured. The star was formed of many beetles.

In Jamaica a large beetle, the Lampyris, is used by ladies. Some of the phosphorescent beetles used by them give out lights that have to be seen to be appreciated, and more than twenty different kinds are used, representing as many different degrees of light, shade, tint, etc. One, the Pygolampis, has a rich orange color, changing to yellow, flickering in intermittent flashes of light; another, called Photuris, is curious for the gradual increase of light it shows; commencing with a faint reddish hue, it rapidly grows in brilliancy, finally blazing like a torch, a rich green light, and then dying away to reappear again. They attract other light-giving beetles, and frequently numbers of lesser lights are seen flitting around them, combining red and yellow lights of the greatest brilliancy. Other uses are made of these beautiful creatures than ornaments. Travelers have fastened them to their feet and carried baskets of wicker to light their way in the dark.

Snakes have been used as ornaments, the small inoffensive green snakes being the most popular, on account of their beauty and harmless nature. They coil around the arm, clinging on with all the tenacity of their golden jewelled imitators that are now so fashionable. Animals or parts of them, though naturally the adjuncts of barbaric splendor, are greatly used in the make-up of fashionable toilets of the present day. Some of the handsomest sleeve buttons and studs are made

of polished fish skin—sharks or dog-skin being preferred, as they take a fine polish and closely resemble the fossil coral Favosites, that is also used, and when highly polished the delicate cells that were once the home of the coral polyp are distinctly visible, and as a whole resembles honeycomb.

An expensive costume was a cape made of an extremely rare humming bird. The whole bird was hardly larger than one's thumb and on its breast a single patch of gold was found about an inch in length. The cloak was composed wholly of these patches, and in the sunlight must have vied with the golden fleece. The birds are valued at \$50 each.

A lady in St. Augustine created a sensation by appearing in public with a chameleon resting on her headdress, and held there by a delicate silver chain. The little creature was perfectly tame and made no attempt to escape; but when touched by any other than its owner, its throat puffed up and curious waves of color passed over the whole body, ranging from deep green to dark brown. Small lizards are used in Egypt by some of the native ladies as ornaments, and lie half concealed in the drapery that overhangs the face. The red clawed soldier crabs are sometimes used in Mexico as pins. The crab is dislodged from its stolen shell and given a beautiful pearly one, or one that has been plated with gold or silver. Fastened to the lace by a pin and chain, they make unique ornaments.—*Jeweler's Circular.*

ABRAHAM LOUIS BREQUET.

[A BIOGRAPHICAL SKETCH BY D. N. IN *Allg. Uhrmach. Ztg.*]

What a volume of incentive contemplation to the growing watchmaker is connected with the honored name of a man who, among the horologers of Europe up to our time, has been one of the greatest and most skilful masters.

Born in want in the year 1747, in Neuenburg, Switzerland, whither his father, who was a merchant, was forced to fly from France, for the sake of his religion, he showed even in earliest childhood a deep interest in horology, which stood in high repute in his native town. The parents decided to let him learn watchmaking, but the father died when the boy was barely eleven years old, leaving the widow and child in misery.

Misfortune, however, has often been

the incentive to genius; and so it was in this case. The mother, after a lapse of a year, married a watchmaker, who enjoyed universal esteem on account of his moral qualities, and the youth accepted with joy the invitation of his stepfather to become his apprentice. But the monotonous, sedentary pursuit, the regular and strictly inspected work of the workshop was little relished by him, and the actual progress made did not justify the high expectations entertained of him. In fact, he made no progress, and who knows if this great genius might not have disappeared altogether under existing circumstances, if his stepfather had not resolved to leave Neuenburg, and go to Paris. When the change was accomplished, he apprenticed his stepson to a watchmaker in Versailles, for further information, who was a very eminent master of the art, and who, as soon as he happily recognized the inherent qualities of the boy, began to develop and cultivate them, so much so that even after a short period in his workshop a complete change had taken place in him. Labors which had been once his detestation, became his pleasure, and manipulations, which with all possible endeavor, could not be mastered, were acquired in a short time without exertion. All his capabilities suddenly developed, instigated by the love and confidence which his master ever demonstrated for him, in a most surprising manner.

Within a few months after completing his apprenticeship of three years, he had the misfortune of losing both his parents and the duty developed on him at so tender an age of providing for his younger sisters and brothers. And how diligently and untiringly worked the young man. He bore with pleasure every privation to support them in honor.

Although an excellent workman, he felt himself deficient in astronomy and mathematics, without which he considered it impossible to arrive at a greater perfection in his art. He commenced a still greater degree of frugality and shunned the most trifling expenses for the purchase of pleasure, and this, united to an untiring diligence, soon enabled him to enroll himself in the class of Professor Morin, in the school of Mazarin in Paris.

But the unassuming and knowledge seeking young horologist did not remain hidden to the celebrated professor; he soon singled him out from among his

scholars, not alone by the distinguished praise which he paid to the works of the young artisan, but also by the still greater honor of establishing personal relations with him. And nothing more decisively influenced Brequet's future great achievements both as horologist and as a mechanician than this intimate relation which sprung up between the great man of letters and the young watchmaker, who recognized in the study of theory the securest means of elevating himself beyond mediocrity in his calling.

After having worked for a number of years in the different workshops of Paris, he purchased, with his savings and the assistance of his friends, a small house in the vicinity of the hotel de ville, and commenced business on his own account. Although very excellent in his pursuit, he was far from enjoying a European fame.

His celebrity was mainly due to a watchmaker Arnold, in London, who with mere disinterestedness assisted him with all the means at his command. The French Revolution caused the young man to leave France for several years; he went to England, and engaged himself uninterruptedly with watches so extremely valuable for their assistance to mathematical sciences.

When the internal affairs became settled, he returned to Paris, and his endeavors not alone brought him fame, but also, what happened more seldom—wealth. He was appointed horologist of the marine, and finally was accepted as member of the Royal Academy of Science—an honor which is so rarely bestowed. Henceforward, his fame spread. Besides his astronomical clocks, which are diffused in the observatories of all parts of the world, he manufactured artistic clocks and watches, adorned with the most splendid ornaments and cases for the kings and potentates of Europe. A large collection of clocks and watches of all kinds made by him, is preserved in the Tuileries in Paris, and Versailles.

In the workshop, Brequet was solemn and silent, a pattern, in every respect, for his workman, but in social intercourse he was genial and amiable, and was much sought for and respected in all the upper circles of society.

He corresponded with the greatest mathematicians and philosophers of the age; no scientific man of eminence ever left Paris without having paid him a visit.

But the man ever remained single, fru-

gal and unassuming in his surroundings; the small cottage in which he founded his business remained for fifty years his home and workshop. He departed in the full enjoyment of his fame, in the year 1823, highly honored by his colleagues, and deeply mourned by all those whom he had in the most manifold branches of industrial pursuits, assisted both by deed and counsel.

A DIAMOND TESTER.

A correspondent tells of an amusing incident that occurred on a train that was crossing the Rocky Mountains: A traveling peddler undertook in the cars to sell a large "diamond" ring to a miner, who had his pile.

"Hump," said the miner, after critically examining the ring, "they've got common stone up in the diggins where I've been that'll cut that diamond all to pieces!"

"If you'll find a piece of stone that will cut diamond I'll give it to you," replied the peddler.

All right," said the miner, "if I can't cut that diamond with a stone I'll buy it of you."

Thereupon the miner took the ring in his hand and pulled from his vest pocket a small piece of brown-looking stone, similar to a bit of dark free stone, except the grain was very fine, and with this he proceeded coolly to cut and scratch the "diamond" with several ugly-looking gashes. A group of passengers that had gathered about the miner was amazed, but, while they smiled the peddler with his "diamond" withdrew discomfited.

"That little piece of brown stone," explained the miner, "is a piece of corundum that I got in the Rocky Mountains, and it's the best diamond tester in the world. It won't scar a genuine diamond but it will everlastingly cut up pieces of glass or quartz."—*Exchange*.

THE SANCOY DIAMOND.

The art of diamond-cutting is usually supposed to have been invented by Louis van Berquem, of Bruges, in 1456; but closer enquiry shows that he only introduced important improvements into a method already in use. It is said that there were diamond-polishers at Nuremberg in 1378 and the same trade was exercised early in the following century in Paris, where a cross-way called "La Courarie," once inhabited by the work-

men, still exists among the diminishing relics of the past. Nor is it to be supposed that this art was entirely unknown to more ancient nations. In India, from the earliest times, a mode of releasing the crystal from its native husk was employed, which probably differed less in principle than in application from that now used in London and Amsterdam. The gem-engravers of antiquity not only worked extensively with the diamond-point, but in some cases engraved the "indomitable" stone itself. In the Duke of Bedford's collection, for instance, is a diamond engraved with the head of Posidonius, and one bearing a portrait of a Roman emperor was to be seen at the Paris Exhibition, 1878. It is questionable that Berquem first introduced the method of cutting diamonds into regular facets, and employed for the purpose the wheel, with the powder of the gem itself, precisely after the modern fashion. In 1475, he made his first experiment of the "perfect cut" on three rough stones sent him by Charles the Bold, who was famed for his magnificence in jewels. all three were worn by the unfortunate Duke of Burgundy, probably with some regard to safety as to splendor, in his disastrous battles with the Swiss, but the talismanic value had gone out of them, so they were lost with the fortune of their owner, and after many singular adventures, found their way each to the treasury of a separate foreign potentate. The most celebrated of these was the "Sancy" diamond, a fine stone of 58½ carats. It was picked up on the field of Nancy by a Swiss soldier, who sold it for a florin to a priest; unsuspectingly redispensed of by him for a scarcely larger sum, and transported by the currents of chance of trade to Portugal, where it figured in 1489, among the crown-jewels of the unlucky Don Antonio. This monarch in difficulties first pledged, and then sold it for 100,000 livres to Harlay de Sancy, French nobleman, whose descendant, Nicolas de Sancy, was induced to place the gem in pawn for relief of a pressing exigency of the crown in the time of Henri III. For this purpose it was entrusted to a servant to be carried to a jeweler at Metz; but neither servant nor jewel reached their destination, and the conclusion seemed inevitable that the temptation had proved too strong for the man's fidelity. DeSancy alone never wavered in his reliance on the devotion of his dependent, and maintained

that only with his life would he have separated with the precious charge committed to him. And in fact, after some further search had been made, the murdered body of the messenger was found by the roadside. It was opened, and the diamond was discovered in the stomach! Thus, by a last and despairing expedient of fidelity, this nameless hero baffled his foes at the very instant of succumbing to them, and left to posterity the memory of an action brighter than the gem whose safety it secured. Through some unknown channel the "Sancy" diamond came into the possession of James II. of England shared his exile, and was disposed of by him "for a consideration" to his royal host. The "well-beloved" Louis wore it in the *agrafe* of his hat at his coronation, and it rested quietly in the treasury at the Tuileries until the troubles of the Revolution once more set it in circulation it found its way to Spain, was sold by Godoy to Prince Demidoff, and purchased from him by Sir Jamssetjee Jejeebhoy for the sum of 200,000 florins. And here or the present its story ends — *Frasers' Magazine*.

THE LARGEST CLOCK IN THE WORLD

The great and largest clock in the world was contracted for in the year of our Lord 1847, and started running in 1859, and started striking in July of the same year, although the construction was nearly completed in 1854 by the first Mr. Dent, a big name among watch and clock makers at the present day. The architect was Sir Edmund Beckett Denison, who as a designer in horology, has ably proved himself on the top perch.

The clock in its general design is of that kind known as the platform kind, and its plates measure 16 feet over all; the ends are built into the wall, while the bracing resembles the trussing of our bridges. There are three trains of wheels: the time train in centre; hour strike train on the left; quarter train on the right. The main wheels are 40 inches in diameter, while the cam lifters for hammer tails are 38 in diameter. There is only one cam lifter on main hour wheel, with 10 cams and 8½ inch faces of steel. In this connection the above strength is necessary on account of the weight of the hammer to be raised, (420 lbs.) to strike the great 15-ton bell. The quarter chime hammers are much lighter being in portion to the bells to be struck

by them. There are four, and they weigh from three tons 18 cwt, down to one ton and one cwt. The diameter of hoop wheel is 30 inches, and the flys are in the usual proportion, but as the flys are driven with one pair of wheels to throw them on end and reduce friction, the flys proper resemble a large sized barn door, and the way they make the wind blow is awful. I will now describe the time train. The main wheel is 28 inches diameter, while the barrel is 16 inches, with a capacity for two feet of line. Great wheel has 180 teeth; centre 120; third 120; with pinions of 12, 16 and 9. This brings me down to the escapement, which is the far-famed one—the gravity. This one is called the three-legged, and is formed of two wheels with three teeth each on same arbor, with space between, and in this space comes the lifting pallets, which are driven by the weight, and as soon as the pendulum swings against the lifted pallet it is released, thus allowing the pallet or arm to propel the pendulum on its opposite passage, where the same action takes place and a corresponding impulse is given. This escapement takes away all imperfection of trains, as the weight of pallet arm alone gives impulse. This clock beats two seconds; length of pendulum 18 084-1000 feet from suspension to line; of oscillation; weight of ball 685 lbs.; length of suspension spring 5 inches, 3 inches wide and 1-60 of an inch thick; glass used in dials, 2½ tons, and with iron cost £5,334. Going part takes 20 minutes to wind; depth of well for weights 174 feet; clock frame 4 feet seven inches wide; dials 22½ feet diameter; weight of minute hand 2 cwt.; length 14 feet; the pendulum rod is compensating, with an appliance for regulating. The cost of this clock, in addition to dials and hands as above noted, was a little under £3,400, making the clock when finished cost the sum of £8,734. The writer of this will never forget the beautiful sounds of the bells which the clock gives out when striking. The large bell is heard ten miles off, and the small ones four to five. This clock is reported giving an error of only 90 seconds per annum; but the appliance for regulating by making it faster or slower as our city observatory does, debars us from forming an idea what it might be if left alone for one year.— W. A. HENDRIE, in the *Watchmaker and Metalworker*.

BUSINESS CHANGES FOR FEBRUARY.

Daniel Kennedy, jeweler, Springfield, Ont. has sold out; Gordon & Scott, hardware, Wingham, Ont., advertising business for sale; Robert Mitchell, hardware and tins, Chatsworth, Ont., leaving for Manitoba; Robert Sewell, stoves, &c., Toronto, assigned in trust; W. E. Dawson & Co., hardware, Charlottetown, P. E. I., business in future to be carried on by W. E. Dawson under old style; Evans, & Co., hardware, Collingwood, Ont., about dissolving; W. Perret, jeweler, Orangeville, Ont., removed to Manitoba; Rourke & Son, hardware, Charlottetown, P. E. I., dissolved, Allen & Borrowman, hardware, Amherstburg, Ont., have dissolved, Allen continues; J. Johnston, jeweler, Kingston, dead; C. & J. Allen, jewelers, Toronto, opening branch at Winnipeg.

BUSINESS NOTES.

Mr. J. JOHNSON, the well known jeweler of Kingston, is dead. The business will be carried on by his son in future.

THE government have decided to do away with bill stamps in future. A sensible move we think, so probably will most of our readers.

C & J ALLEN the well known jewelry firm of King St., Toronto, have established a branch of their business in Winnipeg, Mr. Joseph Allen being the manager.

THE jewelry trade of Toronto will soon be well represented in Winnipeg if things go on at the present rate. Mr. Charles Robinson, of the Sheffield House and Mr. Roberts, of the Rossin House, having taken up stocks for the purpose of opening out business there.

Mr. E. BERTON, a young and energetic watch maker has bought out the trade watch repairing business of the late Mr. Blundell. Mr. Berton is a thorough mechanic, and we have no hesitation in recommending him to the trade as perfectly trustworthy in every way.

W. C. MIDDLETON, stationer, etc., of Amprior, has assigned in trust. Liabilities, \$7,600; surplus, \$1,600. The cause of his difficulties in having too many irons in the fire—four stores, of which he was the proprietor, more than he could manage with success.

WE notice that Messrs. Zimmerman, McNaught & Co., are about in a few days to remove to their new premises 16 & 18 Wellington Street East, north side. Their new warehouse when finished will be probably one of the finest in the city, and the firm and their customers will no doubt profit by the exchange.

WE have to acknowledge with thanks the receipt of the *American Artizan*, a paper published in Chicago by George Daniels. It is elegantly printed on heavy toned paper, and its reading matter is at once interesting and instructive. It should be taken by every one in the house furnishing trade who wants to know what is going on outside. We shall be glad to have the *Artizan* on our exchange list.

ROBERT SEWELL, a Yonge Street stove dealer, in this city, has failed for the second time. His first failure was while a partner of Whitehead in 1875. Their liabilities which were compromised at 50 per cent were then \$39,000. After this the firm

was dissolved and he continued with apparently poor success, although about a couple of years ago he claimed to have a surplus of \$6,000. Now his liabilities are \$6,000. Outside creditors need not expect a dividend.

THERE are so many suspicious reports being circulated at present about the late robbery of Messrs. Fox & Co. of this city, that we think it well that the gentlemen in question should clear them up. It is said that not only did the robbers take all their jewelry and customer's watches, but that they had sufficient knowledge of the trade and business to tear out and destroy the leaves of the watch repairing book kept by the firm. This is very unusual for ordinary burglars to do, for as a rule they are in too much of a hurry to get off to care about such trifles as watch repair records. We understand that the firm are also asking a compromise from their Creditors on account of the robbery. The affair looks suspicious to say the least, and the Creditors should demand and have a satisfactory explanation before they decide to grant this favor. Although these suspicious circumstances are gravely talked about, we think that ordinary fair play should prevent any one making any charges out of them until they have something substantial to go upon. The gentlemen in question should have the benefit of the doubt and be held innocent until they are proven guilty.

ONE of the most extensive and at the same time mysterious robberies that has taken place in the city for years was perpetrated on Sunday night of last week at the store of Messrs. Fox & Co., 129 King St. East, the estimated loss to the proprietors of the store entered and their customers being over \$3,000. The proprietors of the place, Mr. Fox and Mr. M. H. Saunders, have not very extensive premises, but had a fine stock. Their store is almost immediately opposite St. James' Cathedral, and over it a family reside. Every night the gas is left burning in the store, and in addition to this a policeman and a night watchman regularly pass the place. On Saturday night both partners left the store as usual, after seeing that the stock of jewelry had been placed in cases in the safe, both doors of which were carefully locked. On Sunday Mr. Fox called at the store and took out with him a dog which had been left on the premises. At half-past nine o'clock, Mr. Saunders visited the store and found everything right. About three o'clock the lady who lives over the store was startled by hearing a dull sound below and thinking there might be thieves about the premises got up and slammed the door to frighten them. She then listened and hearing no further noise fell asleep. In the morning about eight o'clock one of the clerks, James Murphy, arrived at the store and as soon as he had opened the door saw that a robbery had been committed, and a very extensive one too. Watch and jewelry cases were thrown about in the most reckless manner, cheap goods were carelessly scattered about the floor, and the walls were depleted of the stock. Shortly afterwards both members of the firm arrived, and at once engaged in making up an exact list of their losses which are estimated as follows:—

50 silver watches.....	\$750
14 gold watches.....	560

14 jewelry rings.....	275
60 gold rings.....	180
40 gold lockets.....	200
6 Albert gold chains.....	40
Cash.....	300
Customers' watches, chains, rings, etc.,	1,000
Total	\$8,005

As said before a paid private watchman and a policeman were continually passing and re-passing the store, the gas was always left lighted at night, a family lived on the flat over the store and the doors and safe were always kept locked. When the clerk arrived he found the front door locked, both doors of the safe ajar and a back door open. As another back door was locked and bolted it is evident the robbers got in from the front which is kept fastened by a slight spring catch. Each of the proprietors has keys for the safe, one to fit each lock, and these they say have never been out of their possession. The instrument they used to assist the keys, and without which the doors could not be opened, was found lying on the floor. The detectives can at present form no idea as to who the thieves are or how the robbery could possibly be accomplished without having keys, as the locks could not be picked and they were not injured in the slightest. Perhaps the robbers may have visited the residence of the firm, and securing their keys got wax impressions of them, after which keys could easily be made.

WE received a few days ago from a jeweler out west a trade circular emanating from the now celebrated (?) house of H. W. Patterson & Co. of Boston, U. S. A., better known to many of our readers as the hero of the late Custom's jewelry seizures in Montreal. In this circular Mr. Patterson characterizes his arrest and the seizure of his goods, as "my late difficulty with the Custom's authorities," a modest way to say the least of putting a crime punishable by imprisonment. He also says "that he has had his attention called to many exaggerated and untruthful statements which have been published regarding his late difficulty" and that "several of his competitors are making capital out of those erroneous statements by trying to convince his friends (?) and customers that he will not again appear in Canada for the purpose of selling goods.

Before going further, we would say that we very much doubt that any of Mr. Patterson's competitors ever took the trouble to make capital out of the reports in circulation about Mr. P's "late difficulty with the Custom's authorities," as most of them consider that Mr. Patterson has pretty well "cooked his own goose" without any outside interference.

Mr. Patterson further goes on to say "I feel confident that your own good judgment will show you the falsity of the former statements and the thinness of the latter," quite a judicious mixture we must say of soft soap and Yaukee cheek. This is altogether too plain Mr. Patterson, the idea of your posing before your friends and customers and the jewelry trade of Canada in general as the victim of jealous competitors is too, too thin altogether. No, no Mr. Patterson you are hardly the kind of material they make martyrs of, on the contrary the custom in Canada is to make quite a different kind of example of persons caught breaking the laws of the country.

What is the Purpose of a Watch Case.

Is it an Article of Ornament? Is it a piece of Jewelry? Or is it made to protect the Movement, the most delicate instrument of precision in daily and general use?

While we do not lose sight of the ornamental features the article should possess (to which the elegance of style and finish of our cases does attest), we maintain that it is of PRIME IMPORTANCE to so construct it that it shall absolutely exclude all dust and rust, which, as all Watchmakers well know, are the great enemies of fine timekeeping.

We beg to call attention to the following letter from a member of the profession in Georgia, which is only one of a great many from all parts of the country, highly appreciating the Patent Dust-Proof Cases of our manufacture.

Letter from B. W. BENTLEY Valdosta, Georgia.

"I can say that I sold one of your Patent Dust-Proof Cases about ten months ago, and the other day it came back to me with the request to make it wind easier. On examination I found that the Stem was rusty, and I enquired into the cause of it. The gentleman stated to me that he was starting off some saw logs that had lodged in the bend of the river, and his chain caught in a bush and threw his watch into about 12 feet of water, and he was about two hours finding it. When he got it out it was running, and he thought all right. In about three months he found that the Stem was hard to turn, and sent it to me.

"I can say that the Watch is all that the Company claims for it, and recommend it to all Railroad and Mill men."

Extract from a letter written by C. S. RAYMOND, Clinton, Iowa,
April 29, 1881.

"I wish you would send me a spring for the Wm. Ellery Watch. * * * By the way, this Ellery is a watch I sold to a farmer, in your Screw Bezel Case, last Fall. The first of January he lost the watch in the woods, and found it in about one foot of water. It had lain three months and over in snow and water, with but a slight injury to the watch—only a hair spring."

The above, as will be seen, were very severe tests, and demonstrate that, for a reasonable length of time, during which a watch might be under water, it would receive no injury whatever.

We wish to call attention to the fact, that although we do NOT guarantee such cases to be absolutely water tight, many of them are, and nearly all of them can be made so with a little care and attention to details, such as thoroughly cementing the glass, &c.

As a Perfectly DUST-PROOF Stem-Winding Watch Case we challenge the World to Produce its Equal.

AMERICAN WATCH CO.,

WALTHAM, MASS.

ROBBINS & APPLETON, General Agents,

NEW YORK.

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CHICAGO.

We have already taken up more time and space than we had intended in touching upon such a subject, but we cannot conclude without saying that Mr. Patterson need be under no misapprehension that the Wholesale Jewelers of Canada are in anyway afraid of his competition. If he pays his duties his rivalry is not to be feared, and if he smuggles in his goods as before he will soon find himself in the clutches of the law, so that in either case the trade need not take the shakens over the prospects before them. Mr. Patterson cannot buy his goods any better, if as well as regular Canadian Wholesale Merchants in good credit, and therefore he has no advantage over them in any way. It was only when his goods were brought in by the underground railway that he was able to offer any wonderful inducements. This being the case we would advise the trade to stick to their regular legitimate Canadian Houses who do business upon old fashioned but honest principles, for by so doing they will save themselves the annoyance of Custom House investigations and perhaps the seizure of their goods.

WORKSHOP NOTES.

To clean gilt metal surfaces, dissolve 30 grains borax in 1 kilog water, and gently rub the article with it; rinse with clean water, and dry with a soft linen rag.

LARGER springs, which are exposed to breaking, are best annealed by rubbing them with tallow and letting it burn off over a gentle fire. Springs thus exposed do not break so easily, and are very elastic.

COLD SILVER WASH—The articles intended to be silvered, of brass, copper or iron, are well cleansed. Iron must be dipped for a moment in a very diluted solution of sulphate of copper, and then rinsed, whereby it receives a thin copper coating to which the silvering adheres. Then prepare the following powder: 3 parts dry chloride of silver are pulverized together with 3 parts of cooking salt, 2 parts prepared chalk, and 6 parts potash. Take a small quantity of this powder, dampen it with a few drops of water, and take some of this paste on cork and rub the clean metallic surface with it, until silvered.

BURNISHING A BRASS WHEEL—When the wheel has been riveted upon the pinion, turn a groove around both, lay the wheel upon a flat cork and grad out the strokes and marks with a blue waterstone, take care not to touch either pinion or wheel. Finish by giving it a fine smoothing, again laying the wheel upon a cork, and grind with a three-cornered file and fine water stone and oil. Then clean it carefully with a soft brush and warm soap water, and polish with a well-cleaned burnisher. Before doing this, lay a few thicknesses of silk paper upon the cork and burnish it with short strokes and with easy pressure.

A MECHANIC who is always in a hurry is incapable of doing good, honest work. The excitable man, who is always "flying around," and whose tools are never at hand when wanted, does not amount to much, he may be busy all day, and apparently—in fact, does work hard, and seems to get over a great deal of ground, but what he does do is neither fine nor substan-

tial. The cool, calm workman, who allows himself neither to be driven nor persuaded to do more than a solid day's work, is the man who leaves his impress on each piece of work he turns out, and years hence it may be found as good and as solid as the day he completed it, but where will be the work that was thrown together at the same date by the man who was always "flying around?" Don't hurry your work too much.

SAYS a writer in a German periodical for goldsmiths The art of counterfeiting silver has at present arrived at such a state of perfection that the silversmith, when buying broken pieces, should take great pains to examine each carefully. Especially is this true with regard to the present German silver. The color of this is always somewhat yellowish grey, and never as clear and white as 13 part silver. Its appearance upon the touchstone is a little reddish, playing into a steel grey. The surest proof is the test upon the touchstone, with pure nitric acid. If of German silver, the stroke will evanesce within a few seconds, without leaving a trace, while silver appears like milk-white lime. pure acid must be used. One kind of this acid destroys the proof of the silver, and this might accidentally be deemed a counterfeit.

SCIENCE AND OTHER NOTES.

ENGLISH steel castings are made by some firms from old files in connection with other material, and are said to be sound and very strong. It is said that the excess of carbon in the stock is found no disadvantage.

THE LIFE OF A SOVEREIGN—The average life of an English gold sovereign is about 18 years, that is, the coin loses three-quarters of a grain in weight in about that length of time. It then ceases to be legal tender. It is said that of the \$100,000,000 of British gold coinage, 40 per cent is worn down below the legal weight.

NEW INVENTIONS IN WATCHMAKING—A veteran watchmaker at Vouvry, Switzerland, claims to have invented a process by which watches will run for years without winding up. A sealed box containing two watches intrusted to the municipal authorities on the 19th of January, 1879, has just been opened and the watches found going.

THE NUMBER OF THE METALS—According to Professor Ordway, the number of metals now known is seventy-seven. Within five years fourteen new ones were recognized: but none of them "have such novelty of character as to require the remoulding of chemical hand books." The names of many of them simply serve "to burden our memories with symbols of things remote from daily life."

AN IRISHMAN once saw a clock which showed the Greenwich and Dublin time, and he saw that the Dublin time was twenty minutes behind that of Greenwich. He asked how that was, and it was explained to him that Dublin being to the west of the first meridian, must have its time later than that of Greenwich. "Then be the powers!" says Pat, "there is another injustice to old Ireland."

THE New York Court of Appeals has decided that a watch is not jewelry. It is not carried or used as a jewel or ornament, but as a timepiece or chronometer, an article of ordinary wear by most

travelers of every class, and of daily and hourly use by all. It is useful and necessary to be in his room as out of it, in the night as the day-time. It is carried for use and convenience, and not for ornament.

THE difference in time between New York and London is a curious feature in ocean telegraphy. The London banker is in the full swirl of traffic when the New York agent is first thinking of "getting up." At noon the London markets are closed to this city, where they arrive at seven o'clock in the morning of the same day. The London agent of the New York press telegraphs the most important news issued in the London Times at six o'clock in the morning. It is received at one o'clock in the morning, just in time to be inserted in the New York journals, whose readers have the same matter that the Londoner digests with his breakfast.

A reporter of the Fort Wayne (Ind.) Gazette who is an amateur electrician, tried an experiment the other day in telephoning which was of a novel character. Proceeding to the top of the building, he disconnected a wire, and holding the severed ends one in each hand, allowed the current to pass directly through him, he completing the circuit. The parties at the telephones talked through him without the slightest difficulty, and the reporter experienced no inconvenience from the current. Conceding the success of the experiment, it is not easy to see what practical use can be made of it, as there are very few reporters who would be pleased with an assignment to the tops of buildings as telephone conductors, at least until the Gazette man has so far perfected his discovery that the reporter can understand what is going through him. Such a man would be invaluable for any newspaper, and might pick up a good deal of interesting news, not attainable in any other way.

IN NO TRADE has machinery more thoroughly displaced hand-labour than furniture-making. One would think that the limit of human ingenuity in this direction has been reached. But an English inventor has made another step possible by contriving a process for inlaying by machinery. A veneer of light-coloured wood is glued over dark, or vice versa. On top of this is placed a thin zinc plate, in which is perforated the design to be inlaid. The whole is now steamed and made to pass between two powerful cast-iron rollers. The zinc is by this means crushed into the veneer and the latter into the solid wood beneath. The zinc sheet peels away ready, and all that has to be done is to plane the surface and polish. The work done by this process is singularly perfect, the joints being finer than any that could possibly be made by hand. Henceforth inlaid work in whatever design will be within the reach of short purses.

FROM data received at the Mint Bureau, the director, in his annual report just issued, estimated the production of the United States during the last fiscal year to have been, of gold, \$86,600,000 and of silver, at its coining value, \$12,101,000,—total of \$98,701,000. The inquiries heretofore in regard to the annual consumption of gold and silver in the arts and manufactures have been continued, and with gratifying results. Manufactures of jewelry and other articles and materials of gold and silver reported a consumption of over \$10,000,000 in gold and nearly \$3,500,000

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A Monthly Illustrated Journal. Published in London.

The Representative Organ of the Watch, Jewellery and Kindred Trades in the United Kingdom.

It is full of original information and thorough practical instruction contributed by the leading writers on the various subjects connected with the above trades. The text is well illustrated by wood-cuts, and two supplements of artistic designs for jewellery, etc. accompany each number.

This important Trade Organ, now in its seventh year of publication is in the hands of every British Watchmaker, Jeweller and Silversmith, and is therefore a most valuable medium for manufacturers requiring publicity in Great Britain.

Our list of permanent contributors includes such names as J. U. Poole, Richard Whitaker, Henry Ganney, Moritz Grassmann, J. Herrmann, E. J. Watherston, W. H. Singer, an ample guarantee for the sterling value of the journal. Subscription 5s. per annum.

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in silver. Of the gold used, \$2,300,000 was reported as United States coin melted. The Assay Office at New York delivered to the manufacturers during the year \$5,700,000 of gold in bars, and \$5,100,000 in silver. Taken together they appear to indicate a consumption of at least \$11,000,000 in gold and \$6,000,000 in silver, which would probably have been confirmed had all manufactures that were addressed promptly responded.

SAID TO BE THREE CENTURIES OLD.—Mr. G. W. Stimpson, of Old Mackinac, brought into our office, recently, a relic that is a curious combination of wrought silver consisting of five pieces—two seals one watch key, one ring, and a clasp that at one time must have enclosed a watch-guard. One of the seals was in comparatively good shape, and showed the original design very plainly, and in quite plain figures the date 1563 appeared to the naked eye, or 318 years ago. On the ring which connects the different pieces together, is the device of a dagger and the letter "M," thus indicating that it might at one time possibly have been possessed by Father Marquette who founded the first mission at Old Mackinac, over two hundred years ago. It was found by a gentleman looking for relics inside the old fort grounds there, and from him it was purchased by F. J. Stimpson. Our jewelers think that it is of French make. If it was not once owned by Father Marquette, doubtless it must have belonged to some of the early French settlers. Still, it might have been buried by some of the inhabitants of the fort before the massacre of 1763. Quite a number of interesting relics of bygone ages have been found there recently, including a silver bracelet, now in possession of J. D. McDonald, a large silver cross by Mrs. G. W. Stimpson, and about nine yards of beads by one of Mr. Stimpson's younger sons, and several finger-rings and other curious trinkets.—*Cheboygan (Mich.) Tribune.*

A VALUABLE plastic material has been introduced in Germany for ornamental and other purposes. Five parts of sifted whiting are mixed with a solution of one part of glue, and, on these two being well worked up into a paste, a proportionate quantity of Venetian turpentine is added, in order to prevent brittleness; a small amount of linseed oil is also put with the mixture to obviate its clinging to the hands, and the mass may be colored by kneading in any color that may be desired. The substance thus formed may be pressed into shapes and used for the production of bas-reliefs and other figures, and may be likewise worked by hand into models—the hands to be rubbed with linseed oil, and the mass to be kept warm during the process. On becoming cool and dry, which takes place in a few hours, it is as hard as stone.

The coral fishing industry is one of the points at issue between France and Italy with regard to the ownership of Tunis. The Italians have monopolized this branch of commerce owing to the Imperial Convention of 1852, which reduced the tax (annual) for Italian coral fishers from 800 to 400 francs. The larger sum is, however, exacted from French fishers, who obtained the right by treaty of the same date. The first Tunisian coral fishers were, we are told, natives of Marseilles, who, as early as 1604, formed a company to work coral. Cutting and polishing manufactories have existed in Marseilles before

1807, for at that date as many as seventeen were found, and many hundred hands were employed in them. Coral was, however, of late years, lost favor in France. In Russia the fashion, however, of wearing it has increased, also in the Levant and elsewhere, the Italians supplying these markets, and it is this monopoly that the Algerians and Marseillais wish to break up.

In China an artistic painter gets little more wages than a carpenter, and the best of the fine decorators of porcelain, China, etc., are satisfied if they lay by enough during their lives to buy a coffin. Gold and silversmiths do a little better. The average pay of the skilled laborer is probably \$3 a week for a master, \$1.50 for a workman, and 50 cents for young people and females. The master lives generally at his workshop, having \$20 to \$30 worth of household goods. He pays \$72 a year for food, \$36 for rent and sundries, \$12 for clothing, and is rich with \$36 left. On the farm everybody must work, the children beginning at six years. From two and a half acres of and a well-to-do farmer will make \$500 a year clear. The farm laborer gets 10 to 15 cents a day besides his food, estimated at 10 cents a day about \$2 a year will clothe him, and he does well if he saves \$4 a year.

On the 3rd of October, at the Paris Electrical Exhibition, a gentleman was leaning over a balustrade to examine an extremely interesting machine of M. Christoflo, when his gold chain made a connection between two conducting wires which happened to be exposed. His chain became red hot and set fire to his waistcoat. Today I had some conversation with a gentleman who was nearly killed the other day by a Brush dynamo-electric machine. Part of the conducting wire was not insulated, and was lying on the floor; he touched the stand of a lamp which formed part of the conducting system; his body then formed a connection through the ground to the naked wire, and contracted his muscles so as to cause his hand to clench the lamp. Ten lamps were in circuit at the time, and so much current was passed through him that eight of them were extinguished. He was powerless to unclasp his hand. Every muscle in his body was paralyzed. His face was distorted; his lungs were so acted upon that he could scarcely breathe. He could only utter a faint unnatural cry. The workman in the place fled from the workshop, believing that some explosion was about to happen. A friend came up and tried to unlock his hand. This broke the circuit and his hands were released, while burning sparks flew to his hands in the action of breaking of the circuit. He was insensible, but has since then greatly recovered, and has derived an improvement to the lamp that will prevent a recurrence of such an accident.

In Sheffield, England, on the 3d inst., the spectacle was shown to visitors, of rolling a huge steel-faced plate for a government war steamer now building. The process, known as the Ellias patent, was satisfactorily completed in a quarter of an hour. The weight of the plate was 30 tons 16 cwt., and the length 10 feet 4 1/2 inches; breadth, 8 feet 9 inches; and thickness, 19 inches. Afterwards the visitors witnessed the flanging of marine boiler ends by hydraulic pressure in one operation. A patent recently granted in Vienna and Berlin uses bands of steel, which is tempered and hardened, to transmit motion from one pulley to the other, the faces of the pulleys being turned perfectly flat and then faced with a varnish of rosin, shellac and asphalt.

THE WATCHMAKER And Metal Worker

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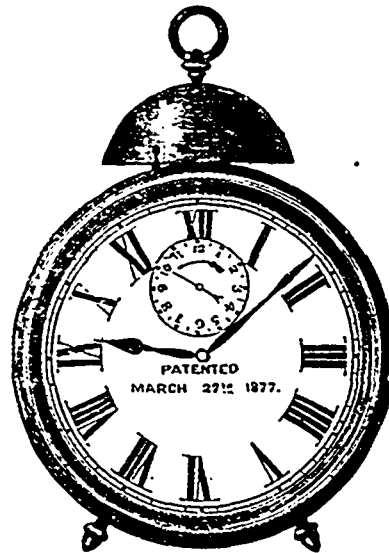
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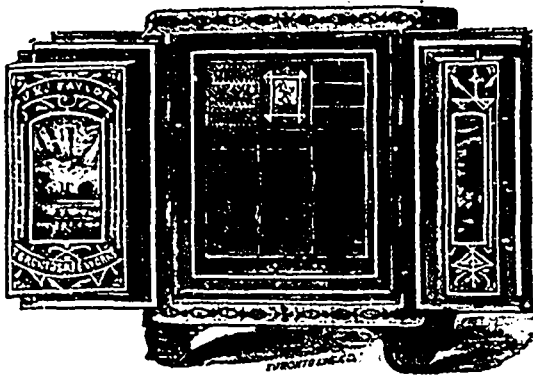
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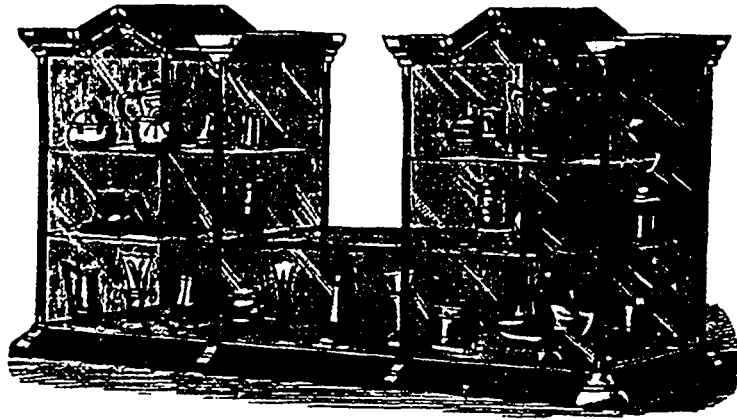
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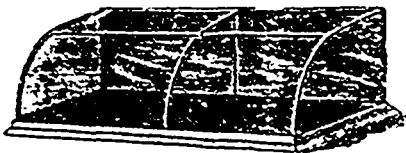
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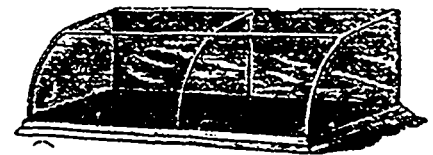
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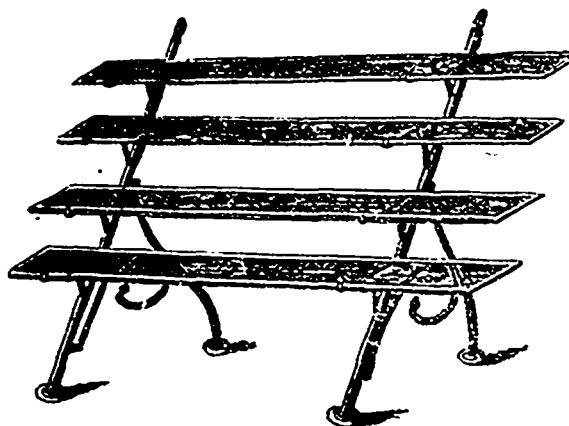
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