AN IMPROVED MAP.

The illustration is of a map consisting of two revoluble disks or hemispheres, and fixed universal meridians for them, by which one can fix the time in any place in the world without an error of more than four minutes, the map also indicating the rising and setting of the sun, according to the season of the year and the latitude, all countries in the world where the sun is rising or setting being seen at once. This map has been patented by Mr. Miguel Arriaga, of the city of Mexico, Mexico, and is being introduced by Mr. Alberto Ituarte, Calle de Alfaro, No. 15, Mexico. In a suitable frame are mounted wheels which mesh with each other, and on whose top edges are disks of transparent material displaying a map of the world in two hemispheres, the northern and the southern. Set in the casing, directly above the disks, are glass covers on whose undersides are etched meridian lines terminating at the edges of the disks on graduations on fixed boards secured in the frame under the covers. The graduations on the boards for the meridians on the glasscovers commence with zero at the top, until the lowest point directly opposite indicates 180°. Next to this meridian graduation is arranged a time graduation to indicate the hours of the day. The gear wheels carrying the hemisphere disks are revolved by a small gear, with a button or head to be taken hold of, the hemispheres being thus simultaneously rotated to bring them into the desired position. The sun appears to be shining on the upper half of each hemisphere, while the lower half indicates night, to represent which shaded boards are fastened under the transparent map-carrying disks, so that the lower part of the hemispheres, looked upon from above, appears to be in partial darkness. Between these spaces of light and shadow a band is arranged under each disk and above the when it is filled place a padded board on top and rock

upper light portion, an intermediate dotted red space representing twilight, and a lower shaded portion corresponding to the shaded tops of the boards. This band is held on curved springs, extending centrally across under the disks, and the springs are moved to shift the band, the springs being connected by links and bell crank levers with a button in convenient reach, whereby the twilight portion of the bands may be shaded up or down to indicate twilight at the proper place. Where the light and dark backgrounds under the disks terminate sunrise and sunset are indicated, the intervening red spaces denoting the duration of dawn or twilight. The map is adjusted to any particular meridian by turning the button at the bottom, revolving the hemispheres until the name of the place appears below the hour chosen, when the corresponding time in any part of

twilight, prevail.

Cost of Torpedo Boat Destroyers.

The contract prices of a large number of the torpedo boat destroyers now being constructed for the British navy are given in a blue book recently issued in England. The general dimensions of the vessels are about 200 feet in length and from 230 to 240 tons displacement. Their engines are about 4,000 to 4,500 I. H. P. and a speed of 27 knots has been attained by them. Of this type three built by Messrs. Yarrow, of London, cost \$187,000 each. Messrs. Thornycroft, of London, have built three at \$182,150 each. The average price is about \$185,000, though in some cases considerably higher than this. By way of comparison, it is interesting to note that the French government recently paid ture of thirty-two degrees as possible. They should \$152,600 for a 27 knot torpedo boat only 140 feet long

Marketing Apples.

Some essential points to be considered in the marketing of fruit were given by Mr. George A. Cochrane in a paper read a few weeks ago before a meeting of the Massachusetts Fruit Growers in Worcester. We quote in a condensed form a few paragraphs, which will be found interesting to buyers as well as growers :

For several reasons the barrel is too large a package for apples, which should be marketed in boxes no larger than those used for oranges and lemons. Last fall I advised the trial of such a package, and suggested that each apple be wrapped in paper as oranges and lemons are. Three thousand cases were sent to me for shipment to Europe. Out of fifty growers of apples only three understood what a close selection of fruit meant, and the apples sent by these three growers sold in London at \$2.40 a case, when fruit in a barrel, which held three times as much as one of the cases. brought only \$4. Some growers sent windfalls, in the hope that wrapping them in paper would insure their safe arrival in England. Some sent Snow apples and Russets mixed in the same case. Of course, when barrels are used, new ones, and not second-hand flour barrels, should be used, for, no matter what care is taken to dust and wash them, sufficient flour will remain in the seams or staves of old barrels to rattle out in transportation and dust the fruit.

In packing a barrel, select a fair sample of the contents for the bottom layer. Place the apples, stems down, in the form of a ring, beginning at the outside, and having secured this layer firmly, place the second layer in so as to fit closely in the interstices, then fill the barrel quickly and gently, and when one-third full rock it slightly to settle the apples. Repeat this rocking when the barrel is about three-fourths full, and shaded boards, the band being in folds and having an it while the board is held down firmly. Then place in 14, Mr. Joseph Parrott lectured on "The light of form-

cate fruit ought never to be placed in barrels, except for near-by markets, and then only under the most favorable conditions of weather. Were American apples marketed in as sound condition as oranges are, if they were graded as oranges are as to quality and size, if they were wrapped and packed as oranges are, they would be worth three times as much as they now command in Liverpool.

Argon.

The Paris correspondent of the Standard, writing recently, says that Professor Berthelot made an interesting communication to the Academy of Sciences respecting argon. A small specimen, of thirtyseven cubic centimeters, had been forwarded to him by Lord Rayleigh and Professor Ramsay. M. Berthelot set to work to discover whether argon would combine with any other body, and by inclosing the new gas and vapor of benzine in a glass tube, and sending through it what the Temps describes as un effluve electrique, which I presume to be an inductive current, an absorption took place in ten hours, amounting to 11 per cent. On increasing the intensity of the effluve, the absorption increased to 83 per cent; the gaseous residue consisted of argon, hydrogen, and vapor of benzine. The product of the combination was too small to be analyzed ; it formed a yellow compound not unlike what is obtained with nitrogen. M. Berthelot remarked that the name of the new gas, which is the Greek for "inactive," seemed after his experiment to be no longer appropriate. He thinks that in a short time further compounds of the new gas will be obtainable.

The Invention of Matches. At the Borough Hall, Stockton, on Thursday, March

er days, and how it was obtained." Primitive methods of obtaining light were described, also the quaint processes in vogue in medieval times. The old sulphur-tipped splints of most inflammable wood were then shown, and also the method of obtaining light by chlorate of potash and sulphuric acid. A case containing ten of the original matches made by the Stockton inventor, Mr. John Walker. was exhibited, and also Chinese matches. From these exhibits Mr. Parrott passed on to refer to the inventors of the friction matches. The dates are as follows: The first American patent for them was taken out in 1836. Janos Irmzi, the Hungarian, made the discovery in 1835. He sold it for £700. He was still living in the south of Hungary. Kammerer, the German, discovered it in 1833, and Sauria, the Frenchman, in 1831. He still enjoyed a pension for his discov-

the world will be shown, as well as where the sun is enough more apples to form a cone at least two inches ery. Sir Isaac Holden's discovery was in 1829, but rising and setting, and the locations where dawn and above the chime. Now force the head down with a barrel screw presser, nail the chime hoops, both top and bottom, securely and have the head lining sufficiently large to lap the presser that forms the head.

Never pack red apples until they are of a good color. It is an expensive blunder to wait until the last moment and then strip the tree of all its fruit. It is also a mistake to pick the apples faster than they can be packed. It is a good plan to go over the trees a week or a fortnight before the general picking and remove the well developed and well colored fruit and market it at once. Aside from the advantage of early marketing, such pickings help the fruit which remains. increase its size, and improve its color. Apples should be headed up at once, and if they are to be held they should be hurried into cold storage as near a temperanever be allowed to lie on the ground, and under no circumstances should they be exposed to sun or rain after being picked or packed. Fall varieties decay quickly, because they are exposed to a higher temperature after leaving the tree than the winter varieties are, and more fruit is lost after being picked in the heat than from the frost. Growers who keep apples in bins to market during the winter should select and sort at the time of picking. Only perfect and healthy fruit should go into such bins. Cellars should be ven tilated so that advantage of any change in the temperature can be taken and the fruit kept as nearly as possible at the required coolness. When the average temperature has been above forty-five degrees from the time of sorting up to December 15, apples should be marketed as soon after the turn of the year as possible. When they are kept in the bin after this time they will not stand rough usage and will not answer to ship to Europe in barrels. One reason why fall fruit those touched by the canal will be benefited, owing does not pay arises from the fact that a large quantity of delicate fruit is placed in one compartment, which, because it is airtight, becomes overheated. Such deli-

the late Mr. John Walker, of Stockton, took priority of all, he having invented it in 1827, as his day book proved by the sales entered in it; and thanks to the courtesy of Mr. Hardcastle, Finkle Street, chemist, the lecturer had again had lent to him the original book.-Northern Echo.

Brains versus Luck.

Every mechanic, says the Sanitary Plumber, can call to mind certain men in his particular line of business who seem to succeed with little effort in undertakings where others fail. This class of men are usually spoken of by their friends as being lucky; as having natural talent: as being to the manner born, etc. None know the fallacy of these popular suppositions so well, however, as do the successful men themselves. The cases are rare where successful men would not have been equally successful in lines other than those they follow because energy is the power that bridges difficulties. Brains are certainly an important factor, and while brains cannot be purchased, they can be developed by study and practice, but with the largest equipment of brains success does not follow, unless there be application, industry, and energy. On the other hand, industry and energy often go far to supply deficiencies in talent and brain power. Probably the highest compliment that can be paid to a mechanic is to tell him that he performs difficult work with ease, but no words appeal so little as these to the ears of men who have spent hours in accomplishing what the uninitiated think requires but a few moments' application of 'natural (?) talent."



and of only 123 tons displacement. Similar boats in the English fleet cost only \$72,400 each. Of larger vessels the price of the 14,000 ton cruiser Terrible was \$2,711,735, and that of her sister ship the Powerful was \$2,676,260.

Great Ship Canal.

The ship canal between the Baltic and Black Seas will be about 1,000 miles long. There areno very formidable engineering difficulties. The estimated cost is £20, 000,000, and the construction will occupy five years. The canal will be 27 feet deep, 213 feet wide at top, and 114 feet at the bottom. It is to run from Riga, follow the course of the Dwina, Beresina and Dnieper, and end at Cherson. The canal will be lighted by electricity along its whole length, enabling the transit to be performed in six days, reckoning six knots as a maximum speed. Other towns and districts besides to the improvement of navigation in the various rivers.



THE Fairfield Shipping and Engineering Company launched on March 27th on the Clyde the torpedo destroyer Heart, built to the order of the British Admiralty. The vessel is of 300 tons displacement, and the speed 32 miles per hour.

On the Law of Evidence.*

Parties often enter upon their legal combats with a mistaken idea of their strength, on the supposition that they have ample evidence to prove their claims, only to find that much of the testimony they offer is objected to as "improper, incompetent, irrelevant and immaterial," and is ruled out by the court. All who engage in mercantile transactions involving those elements of uncertainty-misunderstanding of the contract, mistake as to financial responsibility, or changes in condition which may occur between an order and payment-that may lead to contests before the courts, either to establish the contract or collect the debt, should have a general knowledge of the rules of law applicable to the admissibility of testimony.

Testimony, broadly defined, is merely the declarations of the witness under oath, while evidence includes all the means by which any alleged matter of fact, the truth of which is submitted to investigation, is established or disproved; and proof is such an amount of it as shall lead to conviction and produce belief. Testimony may either be given in person or submitted by deposition, and evidence may be either oral testimony or written documents.

Whatever facts are necessarily involved in any transaction submitted to the court are said to be "in issue," and evidence as to their existence or non-existence is always relevant. Such facts may be proved by direct evidence or circumstantially. Direct is the testimony of persons who either saw or heard, or the production of the thing itself. Indirect evidence is proof by some other fact or facts, from which the one in issue may be inferred, as a probable consequence. All facts so intimately connected with the facts in issue as to form part of the same transaction or subject matter are relevant to it. So, also, proof of any facts which would be the natural and probable effect or result of the existence or non-existence of any fact in issue is admissible as relevant thereto. It follows that facts not directly in issue, or relevant, are not admissible.

Evidence as to character, hearsay statements, and opinions, are generally irrelevant, except in certain cases. The opinions of experts on matters requiring special study or experience are admissible, for the purpose of assisting the jury to arrive at a correct understanding of the matters submitted. Other derivative evidence, such as admissions, are admitted; for a

against his own interest; by the declarations of those and the other denies it, the former will not recover whose interests he represents; those jointly interested with him; those whom he has authorized to make admissions or those to whom he has referred for infor. mation

Facts must be proved by the best kind of evidence obtainable. One cannot prove the contents of a letter by copy or oral testimony, unless it is first shown that the original is not in existence or unattainable; nor then if it has been destroyed by the party offering its contents intentionally. If lost, it must be shown that diligent search has been made for it, where it should be if in existence.

Ordinarily the most natural and satisfactory method of proving the existence or non-existence of a fact is by the direct oral testimony of witnesses who have perceived its existence or non-existence by the operation of their own senses; and therefore this is most generally resorted to for that purpose; except where it is a presumption of law; a matter of public record; embraced in a written contract, or by formal deed or document.

tended as a formal and binding statement between the parties, and which has been accepted by both sides. But oral evidence of the terms of a verbal contract is not excluded by the fact that there was a written memoranda, unless the latter was understood by both to embrace their agreement. This rule does not prevent a party from showing that a contract was obtained by fraud, duress, etc. And oral testimony may be introduced to explain what is uncertain, but never to contradict. Any distinct subsequent oral agreement to rescind or modify a written contract, provided the agreement is not invalid under the Statute of Frauds, or otherwise, may be admitted; it being a well recognized principle of common law that any obligation in writing, not under seal, may, in the absence of statutory interference, be either totally or partially dissolved or modified, before breach, by a subsequent oral agreement.

The burden of proof lies on the party substantially asserting the affirmative of the issue; as it is but reasonable that one who relies on the existence of a fact should prove it. In civil actions, of which we write, the party commencing the suit must make out his case by a preponderance of the evidence. This, however, does not require that he have more witnesses than the

party is bound by declarations which he has made other, though if he alone asserts a thing to be true, unless he be supported by documentary proof.

Let merchants be forewarned, preserve their papers, and keep in mind and memory the facts that go to make evidence in courts-for

Thrice arm'd is he who knows what proofs to trust, As well as he who has his quarrel just.

Ferrous Steel.

Thomas Doherty, of Sarnia, Ont., has discovered a new process for improving castings. The sample punching sent appears soft, like wrought iron, but not as strong. He writes :

"I inclose you sample of what I name ferrous steel. It is punched out cold from a top of an ordinary coal range. You can see the grain and sharp edges. It is so ductile that a strip 11/2 inch wide, 1/8 inch thick, 12 inches long, can be wound around a 2 inch gas pipe without breaking; at the same time is of great tensile strength, a ½ inch square bar 12 inches long bearing on the points will carry a load of 500 lb. without fracture. It is made from a mixture of 60 per cent common Oral testimony cannot be given to vary the terms of scrap and 40 per cent No. 2 pig iron. My process is to a written contract, where it appears that it was in- inject a steam jet into the tuyeres at cupola, which forms another element in combustion (hydrogen gas), giving out great heat; forming black oxide of iron on the iron at the point of charge, as it becomes red, magnetic oxide, and is so closely coherent and adherent that the absorption of sulphur from the coke is entirely prohibited on its course down through the furnace. The color of the gases is entirely changed. The molten metal is much more fluid and almost free from slag or dross and gives a casting of much smoother surface with a steely appearance. This process saves fully 10 per cent in fuel and has several other advantages of greater or lesser importance not stated here. It is being patented in all countries. The days of common cast iron are nearly ended."

Improved Grinders for Dressing Metal Rolls.

William E. Harris, of Niles, O., obtained two patents on March 26, 1895, for improvements in grinders for dressing metal rolls without removing them from their housings. Mr. Harris' idea is to form the grinder with a chamber and to connect pipes therewith, so that while the rolls are being dressed a stream of water may be caused to pass through the grinder to keep it cool. Mr. Harris sets forth different ways of doing this in his two patents.

* Clothier and Furnisher.

RECENTLY PATENTED INVENTIONS. Engineering.

FURNACE. - Walter W. Wainright, Palestine, Texas. According to this invention a suction fan is located between the chimney or stack and the fire box, to draw the gases from the stack and force them into the fire box above the grate bars, thus insuring complete combustion and preventing the escape of smoke and obnoxious gases. When applied to locomotives the exhaust passes with the smoke and gases to the fire box, while in stationary boilers and engines the exhaust is passed directly into the throat of the suction pipe for the fan. The device also completely arrests all sparks.

Electrical.

SUPPLY SYSTEM FOR ELECTRIC RAIL ways .- John M. Byron, New York City. This improvement relates to systems where a sectional trolley wire or rail is employed, the sections being insulated from each other and each supplied by a feeder with current from the main line. The improvement provides automatic means for switching the current successively through the sections of the trolley wire or rail, the parts being perfectly insulated and there being but few mechanical parts to get out of order, the mechanism being also arranged to facilitate repair, while the several switches are so devised that if a number of them are damaged the rest of the line will not be interfered with. The improved system is designed to supply the power economically and without danger.

Railway Appliances.

TRAIN ORDER BOX .--- William A. Tucker, Dayton, Tenn. This is an improvement in boxes combined with the levers used for working sema-

formerly patented inventions of the same inventor, designed to avoid danger of breakage, as the mercury cup contains agents by the electrolysis of which the mercury is purified or cleaned. Step brackets formed with step risers extend between and are supported by the sides of the frame, the mercury receptacles being arranged above the steps. The step plates may be removed each independently of the other.

CLEANING RETORTS OF ZINC SMELT-ING FURNACES.—Herman Kaemmerling, Girard, Kansas. After the last draw of metal, and before charging the retort with fresh ore, it is cleaned of residuum, ashes, etc., according to this invention, by discharging jets of water under high pressure into the hot retort throughout its length, thus generating steam to loosen and force out the residuum, the discharge being continued until the residuum is cooled and washed out.

Mechanical.

WRENCH.-James G. Lowe, New York City. This wrench is especially adapted for use around a bicycle, being a quick-adjusting tool adapted for a wide range of work, and being easily and quickly manipulated with one hand. It has claws at the end of its handle designed to be useful in straightening a wheel and a pivoted hook arm for use, in connection with a projecting pin, in manipulating the ball casings.

DRILL CLAMP.-John F. Forsyth, Bloomington, Ind. Simple and effective devices for clamping the drill of stone channeling machines form the subject of this invention. The parts can be readily detached and assembled, and are manufactured at small cost. The head block has a slot straight at one end and tapering inward, a recess having similarly arranged end walls opening into the slot way, while a clamp member fitting in the recess has one end straight and the other tapering, there being also an intermediate clamp member

Miscellaneous.

FILTER. - Joseph G. Sutton, West Newton, Pa. This invention relates to filters employing a porous block, and the patent is for a cheap and durable filter which may be readily cleaned by reversing the flow of water through it to carry a sponge back and forth through a serpentine supply passage, and also cause the water to permeate reversely through the pores of the filtering block, and thus release the foreign matter depos ited by the inflow to the filtered water chamber

OVERHEAD CONVEYOR. - Walter G. Berg, New York City. To facilitate the moving of packages, bales, etc., to and from warehouses, factories, and other buildings, this inventor has devised an apparatus in which an overhead rail is supported on hangers and extends through the building, the carrying chain being secured to a leverfulcrumed on the carriage traveling on the rail, so that by turning the lever a grappling device and the article held' by it may be raised to the carriage. Locking means are provided to hold the grappling device in elevated position. Any number of carriages may be run on the rail, each one provided with a picking up and dropping device.

VENDING MACHINE.- Owensby H. Woodfill, Nevada, Mo. This is a machine especially adapted for dispensing weighty articles, and it is so constructed as to relieve the dispensing mechanism from the greater portion of the weight of the articles. The motor mechanism has a notched disk in engagement with which is held a coin-released brake when the motor is at rest, a number of pivoted arms having head portions forming seats for the support of the goods, and these arms being moved by a pitman connecting them with the disk of the motor.

SPROCKET CHAIN.- Charles E. Fanning, Keokuk, Iowa. A bicycle chain designed to reduce er and not liable to longth riction and u m de vised by this inventor. Pintles unite the links and balls surround the pintles between the links, flanged sleeves fitting reduced ends of the pintles and entering the balls spacing them from the pintles, while the flanges of the leeves abut against the inner surface of the links. The links are braced against sidewise strain and lateral play is prevented, while the balls are moved on their axes by the sprocket teeth, freeing the chain of mud and dirt.

finally washing it with water, using first a strong gambier or other liquor in a wheel handler to give the increased weight.

COMPOUND FOR MAKING CIDER. Philip Nickols, Albany, N. Y. This is a compound which includes burned apple peels, blackberries, sugar, tartaric acid, oil of apples in certain proportions and prepared after a stated manner, to make a cider which does not get sour or hard, and affords a delightful drink for er and winter.

FLOWER PACKAGE. - Hubert Bailey, Brewster. N. Y. For conveniently packing and shipping flowers and blossoms without liability to injury, this inventor has devised an improvement consisting principally of a casing and an apertured plate removably connect, ed therewith to carry the flowers. Means are also provided for attaching a moisture-carrying material in which the flower stems are embedded, so that they are kept in a healthy condition during transportation.

TABLE FORK.—Joseph Eros, Anniston, Ala. This is a patent for a new article of manufacture, comprising a table fork having a ridge upon the upper surface and along one edge of each of its tines, while one outer tine has its ridge on the outside and the other outer tine is widened and has a ridge on the inside, thus form-ing a scoop. With this fork children and others can more readily take up food from the plate and convey it to the mouth.

DISH CLEANER.-John H. Nolen, Jr., Columbus. Ohio. This invention relates to that class of dish washers in which the dishes are rotated in a wire cage in a water holder or pan. The dish holder proper consists of a cylinder having a perforated bottom and internal inclined wings oppositely arranged, adapted to support the dishes and take up water when the holder is rotated. The dishes may thus be thoroughly cleansed, and ndth

tically loci phores or switch ie device a semaphore-working lever when the operator takes his order blanks from the box, and automatically unlocking the lever when the order blanks are placed in the box, preventing accidents and mistakes, or the pulling of the signal until the train crew has received its orders. When the semaphores are in or clear for trains the box is closed and the blanks cannot be reached, and when the blanks are out of the hox the signal must be at danger, and cannot be changed until the blanks are put back in the box.

SWITCH WORKING MECHANISM.-Ed ward J. Ill. Jersey City. N. J. For use in connection with an ordinary switch point, this inventor has devised a simple apparatus adapted to be operated by mechanism on a passing car to open or close the switch. It is a screw mechanism which positively moves the switch point, the screw shaft being turned in either direction by a sprocket wheel and chain, there being oppositely moving striking plates beneath the slots in the track bed.

Mining, Etc.

AMALGAMATOR. - Nathan L. Raber, Corvallis, Oregon. This patent is for an improvement on with the ground by a suitably bent wire rod.

and wedge plate.

MICROMETER.-Otto J. Ebert. Cleveland, Ohio. To cover and protect one of the bearings or screw points of the instrument is the special object of this improvement, which comprises a measuring gage well adapted for calipering screw bolts or other articles. A removable cap is provided for the lower bearing or screw point, the cap having a lengthwise slit and opposite lateral perforated lugs, and there being a screw for drawing the edges of the slit together and clamping the ap upon the screw.

Agricultural.

TRANSPLANTER.-Frederick Richards. Freeport, N. Y. This improvement comprises a receiving vessel, open at the top and bottom, and adapted to be forced into the bottom around a small plant in such way that on its removal the plant will also be taken up with the earth around its roots, there being used in connection with it a similar vessel to be forced into the ground at the place where the plant is to be again put down, to remove the earth for the replanting. The invention also provides for retaining plant runners in contact

IRRIGATING DAM. - Hugh C. Magarrell, Trinidad, Col. According to this invention a main plate is adapted to form a central rigid cut-off, the plate having an opening and a slide gate, while wing members pivotally connected with the main plate are adapted to swing outwardly as they are moved vertically. It is a simple device for use in irrigating ditches, made of sheet metal in different sizes and adapted for readily shutting off the water partly or wholly, as desired.

PROCESS OF TREATING LEATHER. Rossiter Owens, Olean, N. Y. To improve the appearance of hemlock leather, making it look equal to oak leather, and also to give increased weight, this inventor has patented a process for treating the leather after it has been tanned and dried in the usual manner with a solution of sal sods, then bleaching it in oxalic acid and | it in the position desired.

the heat in a few seconds, so that they present a bright polished appearance.

WEATHER STRIP.-Philip W. Cassil, Garner, Iowa. This is a weather strip which, when used under doors, is arranged to pass over the sill to the outside when the door is closed, and stand clear of the carpet or floor when the door is opened. It has in ' one edge openings for screws with pivoted heads to be passed into the door, while a shedding strip secured to the door has its lower inwardly curved edge extending over the hinged edge of the strip. A guide rail on the floor and a pin at one side of the door frame act to hold the strip over the carpet when the door is opened and press it down to form a tight joint when the door is closed.

SASH HOLDER.-William Linden, Helena, Montana. This is a holder in which the clamping member is made entirely of rubber or other yielding material, and as the clamping surfaces become worn they may be readily and conveniently adjusted to renew positive contact with the surfaces engaged, the whole device being very simple and inexpensive and capable of attachment on any description of sliding window to hold