MISCELLANEOUS INVENTIONS.

Veneers made of paper have been used in place of wood veneers to a limited extent. That they have not come into general use is due chiefly to the fact that the oil applied to their grained face prevents the due adhesion of the glue or cement by which they are attached to any wood surface to be ornamented. Mr. Isaiah M. Clark, of Coldwater, Mich., has patented a new, simple, and economical process, producing a paper veneer having an oil grained surface, and which will adhere to any object as firmly as wood veneers.

Mr. D. W. Clark, of Tidioute, Pa., has recently taken a patent for an improvement in window sashes, which all housekeepers will regard with satisfaction. It consists of a very simple arrangement of the sash, by which it may be quickly removed for cleaning, glass setting, or other purposes, and as quickly restored. A dwelling house furnished with these sashes has a positively increased value, for the glass work may be kept in handsome condition with much less labor than heretofore. This is an invention that is needed in almost every household. Considering that it is applicable to every window in every house, it will be seen that the uses of the invention, even in a small town, are quite extensive.

Mr. Allen Cox, of Boston, Mass., has patented a sheet metal pan, made without rivets, wire, or solder, and having its ring secured to it without the use of rivet or solder. It has edges as strong and as durable as the ordinary wire edged pan, is of somewhat less weight, is more convenient, as its broad, flat edges afford a good hold in putting it in or out of an oven. It can be manufactured at a greatly reduced cost of material, time, and labor.

An improvement in library lamp fixtures, patented by Mr. Joseph Kintz, of West Meriden, Conn., consists in a novel construction of clamping rings for holding the shade, and in the manner of fitting the stops that arrest the movement of the lamp in raising it.

Mr. Henry B. Winslow, of Marblehead, Mass., has patented an improvement in apparatus for the manufacture of lampblack. It consists in a certain novel construction, whereby the use of water is dispensed with and the character of the production improved.

A self-locking hook, so constructed that the weight of traces or other tension strain will hold the hooks locked to prevent them from becoming accidentally unhooked, has been patented by Mr. Joel R. Haines, Mount Laurel, N. J. The invention consists in forming upon the shank of the hook a toothed head, a toothed collar placed upon the rounded shank of the hook to engage with the toothed head, and a loop or half link attached to the toothed collar to receive the trace or other article and serve as a guard to prevent the hook from becoming accidentally unhooked.

An improved type clamp, patented by Mr. William J. Adams, of Philadelphia, Pa., consists of four tongued and grooved flat metal bands, each bent at a right angle, so that when fitted together they form an adjustable rectangular frame that may be extended or contracted as required to fit a form of types.

A binding for oil cloths, so constructed as to confine and protect the edge of the oil cloth while allowing the binding to be rolled into a coil, for convenience in handling, storage, transportation, and use, has been patented by Mr. George S. Eaton, of Brooklyn, N. Y. The invention consists in a flexible metallic oil cloth binding, made with a thickened flanged edge to rest against the edge of the oil cloth, and at the same time allow the binding to be wound into a coil.

Messrs. Elias Leak, of Longton, and John Edwards, of Fenton, England, have patented an improved apparatus for supporting pottery ware in kilns and ovens This invention relates to certain improvements in apparatus for supporting pottery ware in kilns and ovens while being baked, glazed, or otherwise fired, and has especial reference to the seggars in which the ware is placed and supported while in the kiln or oven.

An improved lamp burner, patented by Mr. Orlando Merrill, of Courtland, Ala., is so constructed that wider and narrower wicks and larger and smaller chimneys may be used with the same burners.

Mr. Joseph Kintz, of West Meriden, Conn., has patented an improvement in extension chandeliers, which relates to the means for retaining the extension rod of a chandelier in any position, as drawn out to lengthen the chandelier, and for releasing it, so that the spring may act to draw up the rod. The inventor makes use of a slide rod having its surface grooved or ribbed concentrically and sliding in a collar that is fitted with loose sectional nuts or clamping blocks, which are inclosed within a beveled cup or ring. The cup is moved in one direction by a spring to force the nuts inward and clamp the slide rod, and is fitted for movement by hand to release the nuts by means of a trigger placed in a convenient position operating through a sliding tube that is connected to the cup.

Messrs. Amos A. Deuse and James Deuse, of Chester, Conn., have patented a die for forming double spiral grooves in bits or gimlets, consisting of the two halves having the longitudinal and slightly tapering grooves and diagonal cross-bars, one pair of the bars being smaller than the other.

A chop conveyer for millstones, patented by Messrs. James H. Ellis, Alexander Scott, and Eli S. Edmondson, of Goderich, Ontario, Canada, consists in a spiral conveyer fitted to revolve in a channel around the bedstone and below the level of the grinding surfaces, which carries the chop to a discharge spout; also, in the construction and manner of operating the conveyer.

Business Success.

Among the rare bits of wordly wisdom uttered by Major Eastburn, one of the former magnates of State street, whose familiar face and form as he stood at his office door at noon day will be recalled by many, none may be more profitably considered at the present time than his comment on making haste to be rich. "I've stood here on State street," said he, "for forty years, and I have seen men accumulate fortunes by speculation, and I've seen these fortunes disappear I have seen men go up in worldly wealth, and go down, and I've always noticed that those persons who were content with slow gains and six per cent interest came out ahead in the long run." The greatest of proverbial philosophers has also said, "A faithful man shall abound with blessings but he that maketh haste to be rich shall not be innocent," and again, "He that hasteth to be rich hath an evil eye, and considereth not that poverty shall come upon him." He hastens best who hastens slowly; not lazily, for there must be work, backed by energy, perseverance, intelligent self-denial, and thorough business habits. Believers in business impossibilities are not as numerous as formerly. For years we seemed to be living in the atmosphere of venture and great undertakings, and our whole industry was tinged with the unearthly light, but of late years we have been suffering from a collapse of these great hollow ideas, and there is hope for a return of the staple prosperity of earlier times.

The past six years of depression has solidified all branches of business. Prudence and economy is now the motto of the successful merchant. The misfortunes of the past did not come for naught. It is a delusion to suppose that success is attained by any kind of patent process. Books are sometimes advertised with such taking titles as "The Secret of Success," "The Road to Wealth," etc., but they make the path of success no plainer or easier for those who are looking for a short road to wealth, power, honor, and influence. These come only of years of intelligent labor and devotion to business, prudence, economy, honest dealing, courage, and perseverance. He that would have true and lasting success must deserve it. A fortune won by blunder or accident, by short cuts, by strategy, or close bargains is not success, and is likely to leave its possessor as quickly as it came. Success must be conquered in a legitimate way. The man who enters business only for plunder and gain, with no thought of his reputation or character, is not a good business man, and is never regarded by his fellows as a successful man. The truth is that real success does not mean wealth, social position, or political honors alone. To these must be added honesty, a heartfelt consideration for others, civility, promptitude of thought and action, intelligence, sobriety, and every manly virtue.

The truly successful business man is one who is complete in everything that belongs to his calling. He has a thorough knowledge of what has been done in his business, and applies this knowledge with untiring diligence to the undertakings before him. He watches and studies the markets, knowing how much is produced of the commodity in which he deals and the amount consumed; he is prompt in decision and execution, truthful in word and conduct, and keeps his credit unimpaired. In all that he does he commands the respect and confidence of all with whom he deals, and maintains a high and noble character before the world, which is beyond all price. The principal of the "survival of the fittest" is nowhere more applicable than in business matters. The unworthy and incapable are sure in the long run to sink to their proper level.—*American Manufacturer and Exporter.*

How Copyright Differs from Patent Right.

The Supreme Court of the United States has lately given two opinions which illustrate what mistaken notions of copyright are sometimes held by courts, as well as by lawyers and clients. Some years ago Charles Selden, of Cincinnati, published a book entitled "Selden's Condensed Ledger, or Book keeping Simplified." In this book, and in one or two others that he published about the same time, the author explained a new system of book-keeping which he had invented, and gave such directions, specimen pages, headings, etc., as would enable a person to understand and apply the system. Each of these books was duly copyrighted. Selden claimed that his copyright secured to him a monopoly of the system which he had invented, and demanded a royalty for the privilege of using it. The system appears to have been a desirable one, and the royalty was paid by a goodly number of persons, including not a few county auditors. But others made use of it without asking the inventor's permission or paying any royalty, and one person published a book embodying substantially the same method. Litigation resulted, and the question was raised whether Selden's plan or system of book-keeping was protected by the copyright of his books. The Circuit Court of the United States decided that it was. This judgment is now reversed by the Supreme Court, which does not deny that a work on book-keeping may be the subject of a copyright which will prevent the unauthorized copying of the book. But the system or secret of book-keeping described in the book is not a subject of copyright. This is an invention for which protection, if any there be, should be sought under the patent laws. The court drew a distinction between a book as a composition and the art, process, or secret described in it. "A treatise on the composition and use of medicines," says the opinion," "be they old or new, on the construction and use of plows, or watches, or churns, or on the mixture and application of colors for painting or dyeing, or on the mode of drawing lines to produce the effect of perspective, would be the subject of copyright; but no one would contend that the copyright of the treatise would give the exclusive right to the art or manufacture described therein."

In the other case referred to, copyright was claimed in a map of New York city constructed on an original and peculiar plan. Substantially the same plan was used without authority in a map of Philadelphia. The United States Supreme Court, without denying that the unauthorized publication of the map of New York would be piratical, held that the copyright did not protect the mere plan, and hence did not prevent the defendant from making a map of another city on the same plan.—*N. Y. Times.*

A File of Novel Construction.

The *Ironmonger* states that at a recent meeting of the Royal Scottish Society of Arts, Mr. J. Kirkwood, of Edinburgh, described a new file for soft metals and wood. This tool is formed of about 200 pieces of separate steel, connected by an iron bar which is passed through the whole and bound together by a screw. The advantage claimed for the file is that filings of soft metals or wood can be got rid of by simply loosening the screw, and thereby separating the plates, this being done with very little delay or inconvenience. Each file will, it is said, last three years, outwearing 30 dozen ordinary files. The cost of the latter would be 36*l.* and the saving that would be effected by using the new file would be 32*l.* Mr. Kirkwood's file is said to be capable of performing quicker and better work than the cut files in ordinary use.

This file seems to be simply a copy from American patents granted several years ago. For example: J. W. Houston's patent, January 19, 1858, shows a file made as above described; G. B. Cubberley's patent, June 2, 1868, ditto; J. H. Clark, July 5, 1870, ditto. In all of these patents the tool is formed of separate pieces of steel, connected by an iron bar, passed through the whole, bound together by screw, and operated as above mentioned.

British Solidity and Caution.

Our neighbor, the *World*, pungently remarks that if the evidence about the Tay Bridge had been given concerning an American structure which had tumbled down and killed ninety or a hundred persons, would not our esteemed British contemporaries have denounced American fraud and flimsiness? As to the metal used for the columns, moulders employed in the work for twenty-seven years "never saw worse;" the coke used for melting it was inferior; holes and cracks were patched up with cement; none of the defective columns, "which were numerous," were broken up, but went into the work, and so on. The most favorable testimony was that of one of the foremen who had been engaged in casting these columns, and he said that the material "was not so terribly bad—for building iron." Not a few witnesses, such as ex-Provost Robertson, of Dundee, an engineer, testified as to the habitual recklessness of the drivers on the bridge. . . . Other habitual travelers gave up the bridge on account of the oscillations and took to the ferry. Altogether the evidence thus far taken seems to indicate such "scamping" in fitting up the bridge and such recklessness in using it as our British brethren have been accustomed to depict as exclusively and characteristically American, and to compare, to our manifest shame and disadvantage, with British solidity and caution.

More New Mines.

The Tucson (Arizona) *Citizen*, of February 7, contains the following: Some exceedingly rich mines have been discovered on the east side of the Graham mountains, in Stockton's Pass, about twenty-two miles from Safford and twelve from Fort Grant. The first locations here were made by B. D. Jones, brother of Senator Jones, and since that time locations have been made by others. The most important claims developed are the Delaware and the Pioneer. The ledge is two and a half to three feet wide, and traceable from 1,800 to 1,900 feet without a break. The assays are $2,300 in silver and $722 in gold. The claims are situated on the north side and in plain sight of the main traveled road. The discoveries have created considerable excitement, and many prospectors are flocking there. One of Jones' mines, the Garibaldi, carries magnificent gold ore, the shining particles being visible in every piece of rock. There is plenty of wood, water, and grass in the vicinity, and a town site has already been located.

A RAILWAY with some novel features has been recently opened between the station of Ribeauvillé (on the Strassburg Basle line) and the town of that name, about 4 kilom. distant. The line is on the road (with which the rails are level), and has a narrow gauge of one meter. There are inclines of forty mm., and curves of fifty meters radius. The train requires only one engineer and one guard. The locomotives weigh nine tons, and among the rolling stock are ten platform wagons, which are arranged for conveying wagons from the main line, without the goods being transferred. These platforms carry two rails, corresponding to the normal larger gauge, and they rest on two bogie trucks, having four wheels each. Thus the larger wagons can be conveyed over the sharpest curves of the narrow line. These platform wagons weigh three tons, and the large wagons, with full charge, weigh fifteen tons, giving a total weight of eighteen tons, which, divided among the four axles, gives a maximum load of only four tons fifty per axle. Passengers, as well as goods, are conveyed on the line. The total cost of the line has not exceeded 250,000 francs.