INVENTIONS RECENTLY PATENTED.

We herewith give brief descriptions of some of the noteworthy Pacific Coast inventions recently patented through Dewey & Co.'s *Mining and Scientific* and *Pacific Rural Press* Patent Department, S. F.:

STEAMING CANNED MEATS, FISH, ETC.—G. J. Ward, S. F. This invention is an improved device for steaming or cooking fresh meat, fruit or vegetables, more especially such as are to be sealed up in cans for preservation. It consists in the construction of an inverted metallic tank, secured to a base and made air-tight by means of hinged bolts holding a wooden packing between the metallic flanges, and also of movable trays and perforated bottoms. The said tank has a steam gauge and a pipe for the admission of steam, and also a pipe for the discharge of condensed water. Various methods have been employed for cooking hermetically sealed goods, but that most generally employed where the temperature is to be raised considerably above that of boiling water, is to place the cans in a solution of salt, chloride of calcium, or other suitable substance, the boiling point of which is considerably above that of water. The use of these solutions stains the cans, destroys some of the goods, and greatly increases the labor of handling, cleaning and packing. Mr. Ward's invention is intended to produce a mechanism which is easily operated, which may be opened and closed hermetically in a very short time, and in which a large number of cans may be handled easily, kept clean, and their contents cooked with rapidity and without variation. The pressure of the external steam, which is considerable, and in proportion to the increased temperature, tends to prevent the cans from being exploded by the act of cooking, and the percentage of loss is much less than when the cooking is done by a high temperature unaccompanied by a high pressure.

WATCHMAKERS' OIL CUP.—Eugene R. Weber, S. F. The improvement consists in attaching the lid or cover to the cup by a spring, so that the cover may be easily slipped on or off by a simple movement of the thumb and finger. When it is desired to remove the cover to reach the oil, the operation will be as follows: The cup stands on the bench, with its front towards the workman, who, with his thumb and third finger at the base of the cup, holds it, while the forefinger slips the cover off to the back side of the cup, where it is held by a spring which holds the cover constantly against the cup and in connection with it. When it is desired to replace the cover, the operation is the same; the spring, with a slight touch on the cover with the forefinger, throwing the cover securely in place. The advantages of this invention will be readily seen by all familiar with the uses of a watchmaker's oil cup. The oil must be kept absolutely free from dust and dirt in order to be suitable for use, and with the ordinary form of lid, which is easily knocked off the cup and is very apt to be mislaid and lost, the oil is frequently rendered unfit for use. By this invention these objections are entirely overcome, as the lid is always attached to the cup.

POCKET FOR CLOTHING.—Yung Chow, S. F. This is the second patent which we have secured within the past few years for a native of the Celestial empire, the patent in both instances covering improvements in clothing. The ordinary pocket openings in overalls, jumpers, etc., are subjected to severe strains at the corners, and various methods for strengthening them have been resorted to, such as rivets or strips of material, formed in cutting out the goods or independently, and sewed across the corner seams in the pocket. In this invention of Yung Chow's he does away with these devices by so constructing the pocket that there are no corner seams, and the cloth is continuous at the pocket points where the corners of the pocket openings are formed, so as to reinforce these points without the necessity of extra pieces of any sort.

PUCKER AND FEEDER FOR THRESHING MACHINES.—Wm. L. Mery, Chico, Butte county. Mr. Mery's invention relates to certain improvements in mechanism for feeding unthreshed straw to the cylinder of a threshing machine, and it consists in a novel construction of a series of rotary feeders, placed one after the other in a feeding trough or spout, and these feeding cylinders are provided with arms or pickers. The pickers are mounted upon shafts extending from end to end of the cylinders, and the shafts are so operated by cams at the ends as to be alternately moved in a radial position, where they are locked until they have carried the straw to a point where it is to be delivered to the next cylinder, when the arms are allowed to fall and be against the cylinder so as to free themselves from the straw until they have made a partial revolution, when they are again projected to their radial position.

HANDLE FOR BOXES.—R. E. Mowrey, S. F. This patent covers the application of peculiar flexible handles to that class of boxes, in which strawberries and other small fruit is packed in drawers for transportation. The rope of which the handle is made, is covered with leather to protect it. Two holes are bored in each end of the box, through which the ends of the rope are passed. A countersink is made around these holes on the inside of the box, and on it the ropes are secured, leaving the inside surface smooth. An inclined groove is then cut downward from these holes on the outside of the box, in which the handle lies when not in use. A wooden strip is placed across the outside of the box, just above the holes, so that when the handle is grasped and pulled upward, it will strike the edges of the strip and protect the knuckles.

GAS PRODUCING COMPOUND.—Louis Marks, S. F. This is an improved gas producing compound or composition to be used in the manufacture of illuminating gas. It consists in combining certain ingredients into a block or corporate body, which can be conveniently handled and transported from place to place. The blocks are then placed in a retort, subjecting them to heat in the usual way.

SCREEN.—James. H. Cavanagh, S. F. The object of this invention is to provide a sieve or screen for separators, which will carry the straw and allow the grain to pass through between the slats without the possibility of the straw lodging and choking the screen. The invention consists in the employment of parallel slats or strips, which extend lengthwise of the screen-frame in a line with the travel of the straw. The screen is constructed without any cross-bars or other intervening obstruction for the straw to lodge against. The slats are placed edgewise in the frame and their upper edges are provided with teeth. An end shake is imparted to the screen, and, as the straw passes up the screen, the falling and receding motion causes the teeth to pass under the straw and take a new hold, so that on the next motion it is carried further up the screen. This shakes the grains from the straw and carries the straw off.

SACK HOLDER.—Covert, Garner and Walthall, Modesto. This is an improvement in a patent granted to John S. Covert, August 28th, 1877. The improvement consist in mounting the frame which carries the adjustable sliding bars and sockets upon a portable vertical standard in such a manner that the holder may be elevated or depressed to suit any hight or size of sack. The invention also consists in extending the tubes or sockets which receive the sliding bars through the axis or bar on which they turn, so that the slides may be as long as desired; and lastly in the employment of a spring catch by which the holding bars are held up out of the way when desired.

PENCIL POCKET.—Samuel Hill, S. F. This is an improved device for holding a pencil when it is out of use, and in a convenient position for use at any time. It consists in the construction of a metallic tube having a pin attached for the purpose of fastening the device to the coat or vest. This tube has openings made in the sides through which the pencil may be grasped by the thumb and finger to remove it. The elasticity of the case is such as to retain the pencil in place when not wanted.

SINGLE BEAM HARROW.—John M. McPike, St. Helena, Napa Co. The "single beam harrow," as the inventor calls it, is an attachment for plows. It is more especially applicable to gang plows, and consists of a single beam provided with inclined teeth, so constructed as to clear themselves. It also consists in a method in attaching and adjusting the harrow. With this device the harrowing and plowing can be done at one operation, saving both time and labor, while a peculiar diagonal motion given to the implement makes it do its work very thoroughly.

ROOF FOR A ROUND CISTERN.—At a recent meeting of the Edinburg Engineers Society, Mr. Rowanes described a form of roof which he had designed for a round cistern. The usual tie-rods are superseded by a central pillar, from which the roof is supported, umbrella-wise. To regulate the supply to the cistern, the opening of the pipe is closed by means of a cap-shaped covering pressed hard against it by a lever worked by the float.

STOCK COUNTER.—P. Lyttleton, Austin, Nevada. This device for counting stock consists in a gate or door, so connected with a registering wheel that each and every animal in passing through the gate will be counted, and the count recorded on a dial which receives the count from the wheel. The gate partially fills an opening which is just wide enough to allow the class of animals being counted to pass through, so that each animal in passing opens the gate to its full width and operates the register.

INTEREST.—"An American Almanac and Treasury of Facts," by A. R. Spofford, Librarian of Congress, contains much that is valuable for reference. We extract a few lines which express very forcibly the accumulation of interest at low and high rates: "One of the causes of bankruptcy is that so few persons properly estimate the difference between a high and low rate of interest, and therefore often borrow money at a ruinous rate that no legitimate business can stand. Very few have figured out the difference between 6% and 8%. One dollar loaned for 100 years, at 6%, with the interest collected annually and added to the principal, will amount to $340. At 8% it amounts to $2,203, or nearly seven times as much. At 3%, the usual rate of interest in England, it amounts to $19.25; whereas at 10%, which has been a very common rate in the United States, it is $13,809, or about 700 times as much. At 12% it amounts to $84,075, or more than 4,000 times as much. At 18% it amounts to $15,145,007. At 24%, which we sometimes hear talked of, it reaches the enormous sum of $2,551,799,404. One hundred dollars borrowed at 6%, with the interest compounded annually, will amount to $1,842 in 50 years, while the same $100 borrowed at 8% will amount to $4,690 in 50 years. One thousand dollars at 10%, compounded, will run up to $117,390 in 50 years."

MARRIAGE.—Never marry a man who has only his love for you to recommend him. It is very fascinating, but it does not make the man. If he is not otherwise what he should be, you will never be happy. The most perfect man, who did not love you, should never be your husband. But though marriage without love is terrible, love only will not do. If the man is dishonorable to other men, or mean, or given to any vice, the time will come when you will either loathe him or sink to his level. It is hard to remember, amidst kisses and praises, that there is anything else in the world to be done or thought of but love-making; but the days of life are many, and the husband must be a guide to be trusted, a companion, a friend as well as a lover. Many a girl has married a man, whom she knew to be anything but good, "because he loved her so." And the flame has died out on the hearthstone of home before long, and beside it she has been sitting with one that she could never hope would lead her heavenward, or who, if she followed him, as a wife should, would guide her steps to perdition. Marriage is a solemn thing—a choice for life; be careful in the choosing.—*Belgravia.*

LECTURE ON CORNS.

In a lecture at the St. Louis Hospital, Paris, on hypertrophy of the epidermis, M. Guibout observed that, while in callosities the hypertrophy takes place at the surface, in corns the hypertrophied part becomes pyramidal, and takes the form of a nail, with its point directed toward the deeper seated parts. This sharp point, lodged in a kind of cupola, which exactly boxes it in, has a tendency to penetrate into the substance of the dermis whenever the base of the corn is compressed. The portion of the dermis which is in permanent contact with the epidermic induration becomes inflamed and altered in character, its papillæ disappearing, so that at last it becomes a true matrix, destined to form deep, new, horny epidermic layers, in proportion as the more superficial layers are eliminated.

Changes of the weather often give rise to great pain in corns, which has been supposed to be due to their hygrometric nature, which, by causing their enlargement, adds to the suffering. But, in fact, the exacerbations are less severe during the time that it rains than they are for some days preceding; and they are also met with when the weather is about to change from wet to dry. These painful exacerbations of the pain of corns are quite as remarkable and as inexplicable as are those of rheumatic pains. The sole efficacious treatment is excision, but care must be taken that this is complete. The summit of the cone must be cut down to, so as to entirely empty the dermic cupola. And then it is quite necessary to destroy, by cauterization, the inner surface of this cupola, namely the matrix of the corn, which will otherwise be reproduced.

The best caustic is sulphuric acid, of which we may deposit a drop, by a match or glass rod, on the excised part. If the corn recurs, the same processes of excision and cauterization must again be resorted to.

TRACING AN UNDERGROUND STREAM.—There are many cases, in various parts of the world, where the whole or part of a stream suddenly disappears from sight, and, in some instances, the place of its re-appearance is unknown, or, at best, but a matter of conjecture. It is a common experiment, where the waters of a river make a plunge and re-appear at a short distance, to throw chaff into the upper waters, and note its appearance upon the surface of the lower. The *Engineering and Mining Journal* describes a different practice. It having been supposed that a portion of the water of the upper end of the Danube went to feed the river Aach, an affluent of Lake Constance, and some 10 miles distant from the Danube, Professor Knop, of Carlsruhe, improved and greatly beautified this experiment by emptying into the Danube some 15 gallons of fluorescence (a very powerful green coloring material), of which 1-20,000,000th part will impart a perceptible color to water. In about 60 hours the waters of the Aach began to show a marked green color, which continued for a day, and, although the current of the Aach passes 1,500 gallons per second, was so pronounced as to alarm the inhabitants.

LAME AND LAZY—A FABLE.

Two beggars, Lame and Lazy, were in want of bread. One leaned on his crutch; the other sat, rubbing his red eyes, and staring in the gutter.

Lame called on Charity, who was standing at her door, and humbly asked for a crust. Instead of this he received a loaf.

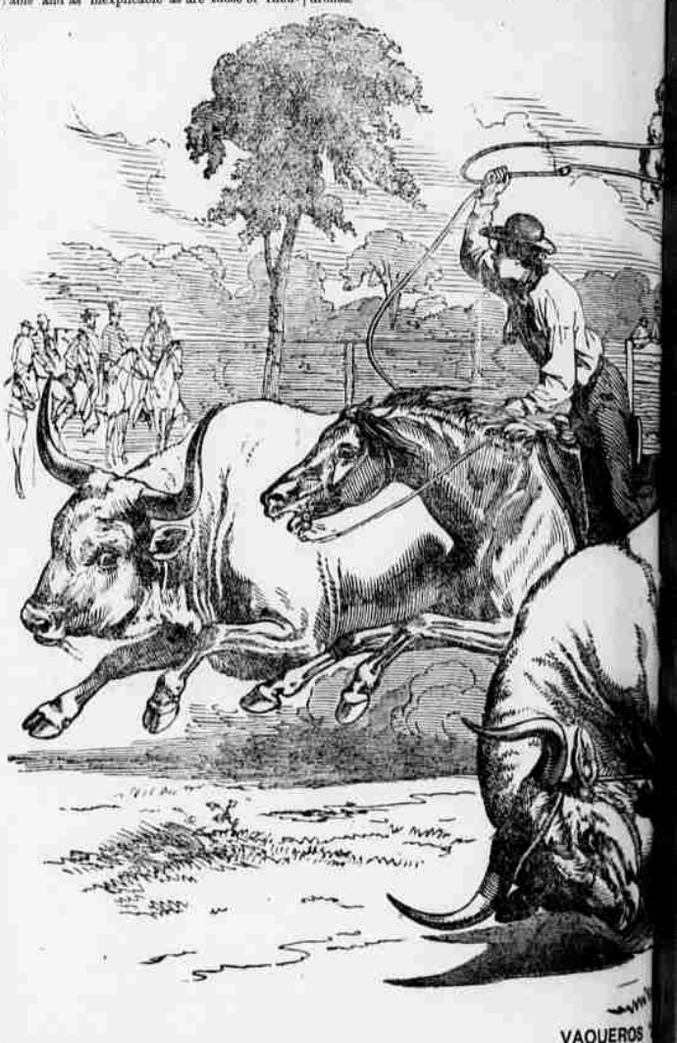
Lazy, seeing the gift of Charity, exclaimed, "What, ask for a crust and receive a loaf! Well, I will ask the old lady for a loaf; perhaps I shall get a cake."

Lazy now applied to Charity and loudly called for a loaf of bread.

"Your demanding a loaf!" said Dame Charity, "proves that you are of that class and character who ask and receive not; so be off directly, and get some work to do."

Lazy, who always found fault, and had rather whine than work, complained of ill treatment, and even accused Charity of a breach of an exceeding great and precious promise, "Ask, and you shall receive."

Charity pointed to a painting in her room, which represented three beautiful figures—Faith, Hope and Charity. Charity appeared larger and fairer than her sisters. He noticed that her right hand held a pot of honey, which fed a bee disabled, having lost its wings. Her left hand was armed with a whip to keep off the drones.



VAQUEROS

"Don't understand it," said Lazy yawning and stretching his arms.

Charity replied, "It means that Charity feeds the lame and flogs the lazy."

Lazy gathered up his rags, and turned to go shambling off.

"Stop," said Charity; "instead of *coin* I will give you *counsel*. Do not go and live on your poor mother, for I will send you to a *rich aut*.

"Rich aunt?" echoed Lazybones.

"Where shall I find her, I'd like to know?"

"You will find her in Proverbs, 6th chapter and 6th verse." But that is where Lazybones did not look; so he sat down by the gutter, and rubbed his eyes and grumbled.

BRITAIN'S IMPORTATION OF FOOD.—A late issue of the London *Times* contains an interesting compilation of statistics, showing the aggregate sum expended by England for food from abroad, from which we glean that the amount paid in the year 1877 to foreign nations for corn, cattle and meat was $484,308,685, to contrast with $435,646,930 in 1876. For live stock the sum disbursed was, in 1877, $30,078,450 as against $36,301,515 in the preceding year—the prices paid being somewhat lower last year than the year before. The sums for fresh meats were much larger, consequent upon the shipment from the United States and Canada of quantities of beef and carcasses of mutton. The total sum paid for foreign stock alive and dressed was, in 1877, $86,568,370; in 1876, it amounted $96,152,275. For corn, the sum paid last year was $315,961,120; in 1876, $257,673,240. Foreign butter cost in 1877, $47,691,625; cheese, $23,840,266; and eggs, $12,362,406, to be compared, respectively, with $48,513,120, $21,257,140, and $13,051,655 in 1876. The British demand for American butter and cheese is constantly increasing.