

*Claim.*—1st. An envelope consisting of a body provided with the usual lapels, the edges of one of said lapels meeting and forming a right angle, substantially as described. 2nd. An envelope consisting of a rectangular body and the usual lapels, the edges of the bottom lapel forming a right angle, substantially as described. 3rd. An envelope consisting of a body and the usual lapels, the bottom lapels when folded reaching to the top edge of the rear side of the envelope, substantially as described. 4th. An envelope consisting of a body and the usual lapels, the edges of the bottom lapel forming a right angle and reaching to the top edge of the rear side of the envelope, when said envelope is folded, substantially as described. 5th. An envelope consisting of a rectangular shaped body, two side lapels, the lower edges of which form with the lower folding crease of said top edge an angle of about one hundred and thirty-five degrees, the bottom lapels, the edges of which form with said folding crease, each an angle of forty-five degrees, and forming at their meeting point an angle of ninety degrees, and a top lapel, the edges of which meeting with the upper folding crease, which forms an angle of thirty degrees, and forming an angle at their meeting point of one hundred and twenty degrees, substantially as described. 6th. The herein described method of cutting envelope blanks, which consists of so forming the edges of one of the lapels that they will form at their meeting point an angle of ninety degrees, substantially as described.

### No. 37,558. Chain Attachment.

(*Attache pour chaines.*)

The Bridgeport Chain Company, assignees of Richard Alvin Breul, all of Bridgeport, Connecticut, U. S. A., 7th October, 1891; 5 years.

*Claim.*—The herein described attachment for chains consisting of a cross-bar made from a single piece of wire, the end portions of the wire doubled back upon the central or body portion of the wire, the length of such doubled portions being greater than one half the length of the wire, and so that the ends of the said doubled portions project beyond each other, the said end portions returned and each bent to form an eye and adapted to receive a link of the chain, substantially as described.

### No. 37,559. Safety Switch for Railways.

(*Aiguille de sûreté pour chemins de fer.*)

Henry N. Hopkins, Taunton, and Emery H. Bryant, Boston, both in Massachusetts, U.S.A., 7th October, 1891; 5 years.

*Claim.*—1st. The combination with the switch-stand, the switch-operating rod and target shaft, of an engaging device carried by the shaft, a yielding engaging device connected with the stand, and a lever and connections to relieve the target shaft from the strain of the yielding engaging device. 2nd. The combination with a switch rod and a switch-stand provided with a yielding cross-bar, of a vertically locking bar adapted to rest in the same horizontal plane with the yielding cross-bar when the parts are in a locked position, and means for elevating the said locking bar above the yielding cross-bar, substantially as and for the purpose set forth. 3rd. The combination with a switch-rod and a switch-stand provided with a yielding cross-bar, of a vertical spindle journaled in the frame, a movable locking-bar keyed to the spindle, a handle for elevating the locking-bar, and means for locking the handle in a depressed position, all of the above parts combined as described. 4th. The combination with a switch-rod and a switch provided with a yielding cross-bar adjustably secured thereto, of a vertical spindle journaled therein, a movable locking-bar keyed to the spindle, and provided with a roller adapted to bear against the cross-bar, and a handle for elevating the locking-bar above the yielding cross-bar, substantially as and for the purpose set forth. 5th. The combination with a switch-bar, and a switch-stand provided with a cross-bar, springs for holding the cross-bar in place, and nuts for regulating the tension of said springs, of a spindle mounted in the stand, a collar secured to the spindle, a locking-bar made vertically adjustable on the spindle, a handle pivoted to said collar, a link connecting the handle, a locking-bar, and provided with a hasp, and a lock for holding the handle on the link, said handle being adapted to the hasp, substantially as set forth. 6th. The combination with a switch-stand, its operating rod and target-shaft, of a yielding locking plate, an engaging device carried by the shaft and vertically movable to engage and disengage said locking plate, and means for operating the said engaging device with reference to the locking plate, substantially as set forth. 7th. The combination with a switch-stand, a switch operating rod and target-shaft, of an engaging device carried by the shaft, a spring actuated engaging device upon the stand and aiding to complete the movement of the switch, and means to engage and disengage said devices. 8th. The combination with a moving rod connected with the switch rails, of a spindle or crank-shaft adapted to operate said rod, a yielding locking plate checking the rotation of the spindle, and an engaging part rotating with the spindle and thrown out of connection with the yielding locking plate by the vertically moving lever, substantially as set forth. 9th. The combination of the standard of fixed parts, the spindle and switch operating rod with spring actuated engaging parts, one of which is carried by the spindle and the other by the stand so formed that the spring shall aid in the completion of the movement of the switch, and means whereby said switch or its lever may be relieved of the resistance offered by the spring engaging devices, substantially as set forth. 10th. The combination of the standard, the spindle and switch operating rod, with engaging devices which are brought together by a spring, and one of which is carried by the spindle and the other by the stand, and a vertically swinging lever adapted to disengage the engaging devices and permit the spindle to be freely revolved, substantially as set forth. 11th. The combination with a switch-stand, a switch operating rod, and a target-shaft, of a spring actuated engaging device to lock the switch in either of its positions and to complete the movement of the switch. 12th. The combination with a switch-stand, a target-shaft, and a switch-rod, of an arm extending laterally from the target-

shaft, and a yielding device arranged to engage the outer end of said arm on the target-shaft, and complete the movement of the target-shaft in either direction, substantially as set forth. 13th. The combination with a switch-stand, a rotary crank-shaft journaled therein, and a switch-rod connected with the crank of said shaft, of a spring actuated device for locking the switch in either of its positions and for completing the movement of the switch, substantially as set forth. 14th. The combination with a switch-stand, a switch operating rod, and a target-shaft, of a horizontally yielding engaging device to complete the movement of the switch in either direction, and a lever for operating and locking the switch. 15th. The combination with a switch stand, a switch-rod, and a target-shaft provided with a laterally projecting arm, of an engaging device for completing the movement of the switch, and a lever for raising and lowering the arm on the target-shaft, substantially as set forth. 16th. The combination with a switch stand, the switch operating rod, and the target-shaft, of an engaging device carried by the shaft, and a sliding spring actuated engaging device connected to the stand and moving transversely to and from the shaft, as and for the purpose set forth. 17th. The combination with the switch-stand, the switch operating rod, and the target-shaft having a crank, of an engaging device carried by the shaft, a yielding engaging device carried by the stand, and a lever and connections to engage and disengage said devices and to turn the shaft. 18th. The combination with the switch stand, the switch operating rod, the crank-shaft, an engaging device checking the rotation of the shaft, of an engaging device rotating with the shaft, said devices being disengaged by movement of one of them independently of the rotary movement of the shaft, as set forth. 19th. In a switch stand, the combination with the target-shaft, an engaging device carried by the shaft, and a yielding engaging device connected with the stand, of means for engaging and disengaging said devices, and means for varying the relative adjustment of said engaging devices, and thereby adjusting the throw of switch-rail, substantially as set forth.

### No. 37,560. Pedal Piano. (*Pedal de piano.*)

Lawrence Alonzo Subers, Phoebus, Virginia, and Samuel Britton Coughlin, Philadelphia, Pennsylvania, both in U.S.A., 8th October, 1891; 5 years.

*Claim.*—1st. A pedal piano having in combination strings inclined from one lower corner of the instrument to the opposite upper corner, a hammer action concentrated at one side of the instrument and pedals having concentrating devices whereby each pedal is caused to act upon its proper element of the hammer action, substantially as specified. 2nd. A pedal piano in which are combined the pedals, the hammer action and a string scale having the treble notes at the left hand side and the bass notes at the right hand side of an observer facing the instrument, substantially as specified. 3rd. A pedal piano having a casing inclosing the string scale, its frame and the hammer action, and located at the rear of the performer's seat, a pedal frame and pedals located in advance of said seat, substantially as specified. 4th. The combination in a pedal piano, of the frame and strings inclined from one lower corner of the instrument to the opposite upper corner, a hammer action concentrated at one side of the instrument, the pedals and a bar serving to transmit the movement of each pedal to its proper element of the hammer action, said bars being angularly disposed in respect to the pedals, substantially as specified. 5th. A pedal piano, comprising a casing containing the string scale frame and hammer action, the pedals in advance of said casing, and a performer's stool secured to the front of the casing, substantially as specified. 6th. The combination of the pedal piano with a frame secured to and projecting forward beyond the pedal frame and having pins for acting upon the damper and hammer pedals of an ordinary instrument, in front of which the pedal piano is placed, substantially as specified. 7th. The within described radiating pedal scale for pianos and organs, said scale having the tops of the pedals arranged on a curve rising from the center toward each end of the series, substantially as specified. 8th. The radiating pedal scale having tongues of graduated length upon the pedals representing the sharps of the scale, the tongues being shortest at the centre of the series and gradually increasing in length toward each end of the series, substantially as specified. 9th. The combination of the frame with the string scale having all of the strings from the treble to bass running diagonally in the same direction from bottom to top of the frame, substantially as specified.

### No. 37,561. Electric Elevator.

(*Élévateur électrique.*)

Otis Brothers & Company, New York, (assignees of Norton P. Otis and Rudolph C. Smith, both of Yonkers), all in New York, U.S.A., 8th October, 1891; 5 years.

*Claim.*—1st. The combination with the electro-motor of an elevator, of a current controlling device, constructed to both reverse and vary the current, and provided with a switch, means for automatically turning the switch to its normal position with the current cut-off, and means for operating said switch from the cage to carry it from its normal position in either direction, substantially as set forth. 2nd. The combination in an elevating apparatus of an electro-motor, controller provided with a switch, a shifter connected with said controller and with the cage to be operated therefrom, automatic means for carrying the shifter to one position, a detent for holding the shifter in another position, and a governor connected with said detent and driven from a moving part of the apparatus, substantially as set forth. 3rd. The combination with the cage and electro-motor of an elevator, of a controller provided with a switch, a shifter connected to be operated from the cage and also connected to said switch, means for carrying the controller to one position, a detent engaging with bearings upon the controller to hold it in another position in either direction, a governor driven from the armature and connected with said detent, the parts being arranged to release the shifter when the speed of the armature is reduced, substantially as set forth. 4th. The combination with the shifter