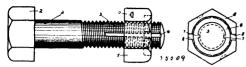
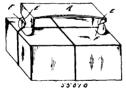
No. 55,509. Nut Lock. (Arrête-écrou.)



Harry J. Buell, Fort Waynes, Indiana, U.S.A., 5th April, 1897; 6 years. (Filed 18th March, 1897.)

Claim. -1st. The combination with the screw threaded bolt having one or more longitudinal grooves in the threaded portion thereof. of a nut fitting said bolt and having a recess or countersink in the outer face thereof surrounding the bolt opening and adapting to receive a metallic washer, and an annular washer having upon its inner perimeter one or more interlocking flanges adapted to register with said grooves of the bolt, and provide on its outer perimeter with a plurality of serrations adapted to impinge upon the said nut, as described, and thereby prevent its rotation by a binding friction therewith. 2nd. In the nut lock the combination of a screw threaded bolt having one or more longitudinal grooves in the threaded portion thereof, a nut fitting said bolt, recessed upon its outer face to form a seat for a fixed washer, and provided with one or more radial slots 8 for the purpose specified, a washer 6 having one or more ribs or flanges 7 adapted to form an interlocking engagement with said grooves and provided upon its perimeter with a series of serrations adapted to prevent the rotation of said washer by forming a binding friction therewith as described, and a spring plate 13 adapted to secure the said washer against displacement by an interlocking engagement with the said and, all substantially as described. 3rd. In a nut-lock a metallic washer 6 adapted to form a locked engagement with the threaded bolt, and having its perimeter provided with a plurality of serrations adapted to secure the nut fitting said bolt against rotation by a binding friction therewith, substantially as described. 4th. The combination with the grooved bolt of the nut having an annular recess surrounding the bolt-aperture, and a washer provided with an inwardly projecting tongue, or tongues, and peripheral teeth, substantially as shown and for the purpose set forth. 5th. In a nut-lock, the combination, of a grooved bolt, a nut having an annular recess surrounding the boltaperature and a transverse opening at one side communicating with said recess, together with a washer having tongues and peripheral teeth, substantially as shown and for the purpose set forth. 6th. In a nut-lock, the combination with the grooved bolt of a nut, having an annular recess surrounding the bolt-aperature, teeth projecting into said recess and a transverse opening, as shown, together with a washer having inwardly projecting tongues and peripheral teeth  $c^1$ , said teeth being adapted to interlocking with the teeth of the nut and engage therewith by friction contact.

## No. 55,510. Package Handle. (Poignée pour paquets.)



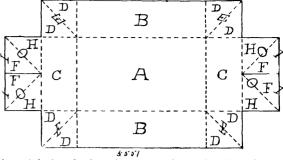
Alexander Walker Beers, Bayonne, New Jersey, U.S.A., 5th April, 1897; 6 years. (Filed 18th March, 1897.)

Claim.—1st. A handle for packages, consisting of a body portion, and end portions adapted to be bent at an angle thereto, said end portions being provided with slots into which the string or cord with which the package is bound is inserted, substantially as shown and described. and described. 2nd. A handle for packages, comprising a body portion and end portions adapted to be bent at right angles thereto, said end portions being provided with slots, into which the string or cord with which the package is bound may be inserted, substantially as shown and described. 3rd. A handle for packages, comprising a body portion and end portions adapted to be bent at right angles thereto, said end portions being provided on one side with notches or recesses, and with slots formed in said notches or recesses which extend into said end portions and are directed backwardly and outwardly, substantially as shown and described. 4th A handle for packages, comprising a body portion and end portion adapted to be bent at right angles thereto, said end portions being provided on one side with notches or recesses, and with slots formed in said end portions, and are directed backwardly and outwardly, said handle being composed of two separate similar parts which are secured together, and between the ends of which are packed strengthening strips, substantially as shown and described.

## No. 55,511. Infold, Outfold, Card Board, etc.

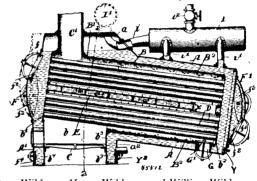
(Boite pliante.)

set forth, triangular corner sections that are infolded or outfolded and overlapping, and locking flaps formed as extensions of the end



sections of the box, having triangular sections to interlock with said triangular overlapping corner sections. 2nd. A folding box, consisting of the bottom A, sides B, B, ends C, C, triangular corner sections D, D, adapted to fold in or out, upon and overlapping each other, as set forth, and the triangular in and outfolded sections F, F, of the flaps I, I, pushed under or behind triangular corner sections D, D.

No. 55,512. Water Tube Boiler. (Chaudière tubulée.)



Andrew Wildman, Henry Wildman and William Wildman, all of Chicago, Illinois, U.S.A., 5th April, 1897; 6 years. (Filed 18th March, 1897.)

Claim.-1st. In a water tube boiler, the combination with a flue chamber for the passage of the products of combustion, water tubes therein and a water jacket around said chamber, of a water box within said flue chamber connected with the water jacket, and having an opening near the rear of said chamber, substantially as described. 2nd. In a water tube boiler, the combination with a flue chamber for the passage of the products of combustion, water tubes therein and a water jacket around said chamber, of a water box extending across said flue chamber and opening at the sides and front into the water jacket, substantially as described. 3rd. In a water tube boiler, the combination with a flue chamber for the passage of the products of combustion, water tubes therein and a water jacket the products of combustion, water tubes therein and a water jacket around said chamber, of a water box separating the upper from the lower portion of the flue chamber except at the rear, and connected with the water jacket around the flue chamber and a series of openings in the outer casing approximately in line with the water box, substantially as described. 4th. In a water tube boiler the combination with a flue chamber for the pa-sage of the products of combustions to the theorem of the paragraph of the products of combination with a flue chamber for the pa-sage of the products of combination with a flue chamber for the pa-sage of the products of combine the paragraph of the products of combine the products of the products of combine the products of the prod bustion, water tubes therein and a water jacket around said chamber, of a water box separating the upper from the lower portion of the flue chamber except at the rear, and connected with water jacket around the flue chamber and a series of flues connecting the inner with the outer casing, substantially as described. 5th. In a water tube boiler, the combination with a flue chamber for the passage of the products of combustion, water tubes therein and a water jacket around said chamber, of boiler heads riveted to the ends of the outer casing, man holes located in said boiler heads and in suitable numbers to facilitate easy access to all of the flues and offset with respect to each other at the opposite ends of the boiler, substantially as described. 6th. In a water tube boiler, the combination with a flue chamber for the passage of the products of combustion, water tubes therein and a water jacket around said chamber, of a water box separating the upper from the lower half of the flue chamber except at the rear end, and a man hole connecting the bottom of the inner casing with the outer casing, substantially as described 7th. In a water tube boiler, the combination with a flue chamber for the passage of the products of combustion, water tubes therein, a water jacket around said chamber, and a water box separating the upper Thomas Grayson Bell, Ottawa, Ontario, Canada, 5th April, 1897; 6
years. (Filed 18th March, 1897.)

Claim.—1st. The herein described improvement in folding boxes, consisting of a single blank formed with bottom, sides and ends, as a screen of blocks separating the same from the lower portion of the flue chamber except at the rear end and connected with the water jacket, of a heat retaining covering composed of a layer of non-conducting material, a wire screen and a scribes of blocks separating the same from the lower portion of the flue chamber except at the rear end and connected with the water jacket, of a heat retaining covering composed of a layer of non-conducting material, a wire screen and connected with the water jacket, of a heat retaining covering composed of a layer of non-conducting material, a wire screen and connected with the water jacket, of a heat retaining covering composed of a layer of non-conducting material, a wire screen and connected with the water jacket, of a heat retaining covering composed of a layer of non-conducting material, a wire screen and connected with the water jacket, of a heat retaining covering composed of a layer of non-conducting material, a wire screen and connected with the water jacket, of a heat retaining covering composed of a layer of non-conducting material, a wire screen and connected with the water jacket, of a heat retaining covering composed of a layer of non-conducting material, a wire screen and connected with the water jacket, of a heat retaining covering composed of a layer of non-conducting material, a wire screen and connected with the water jacket, of a heat retaining covering composed of a layer of non-conducting material, a wire screen and connected with the water jacket, of a heat retaining covering composed of a layer of non-conducting material, a wire screen and connected with the water jacket, of a heat retaining covering composed of a layer of non-conducting material, a wire screen and connected with the water jacket, of a heat retaining covering