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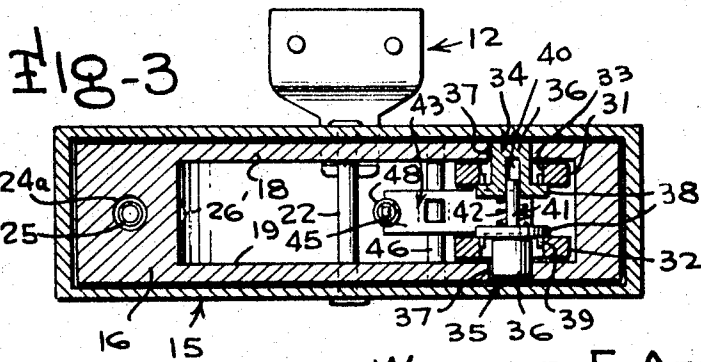
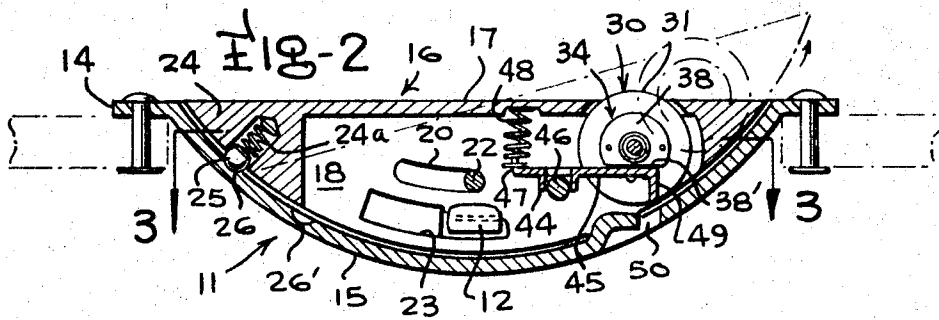
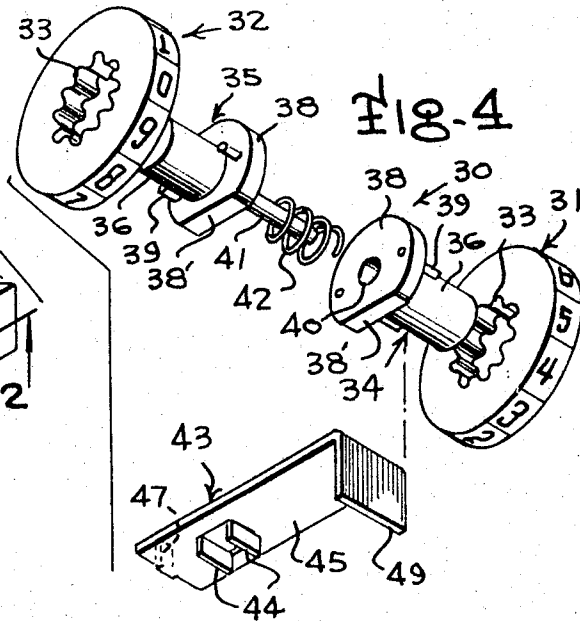
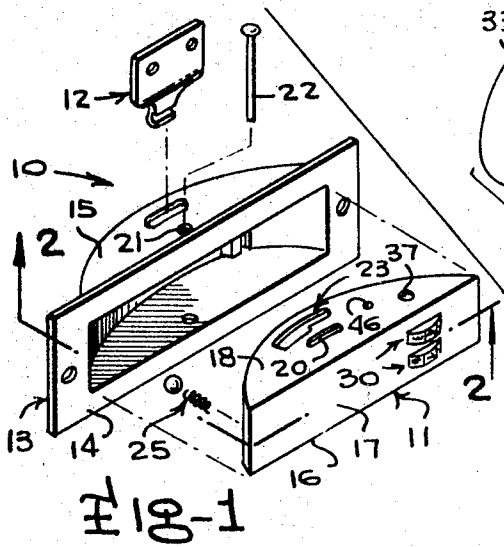
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3,459,016

COMBINATION LOCK MECHANISM FOR LUGGAGE LATCHES AND THE LIKE

Filed May 31, 1967

2 Sheets-Sheet 1



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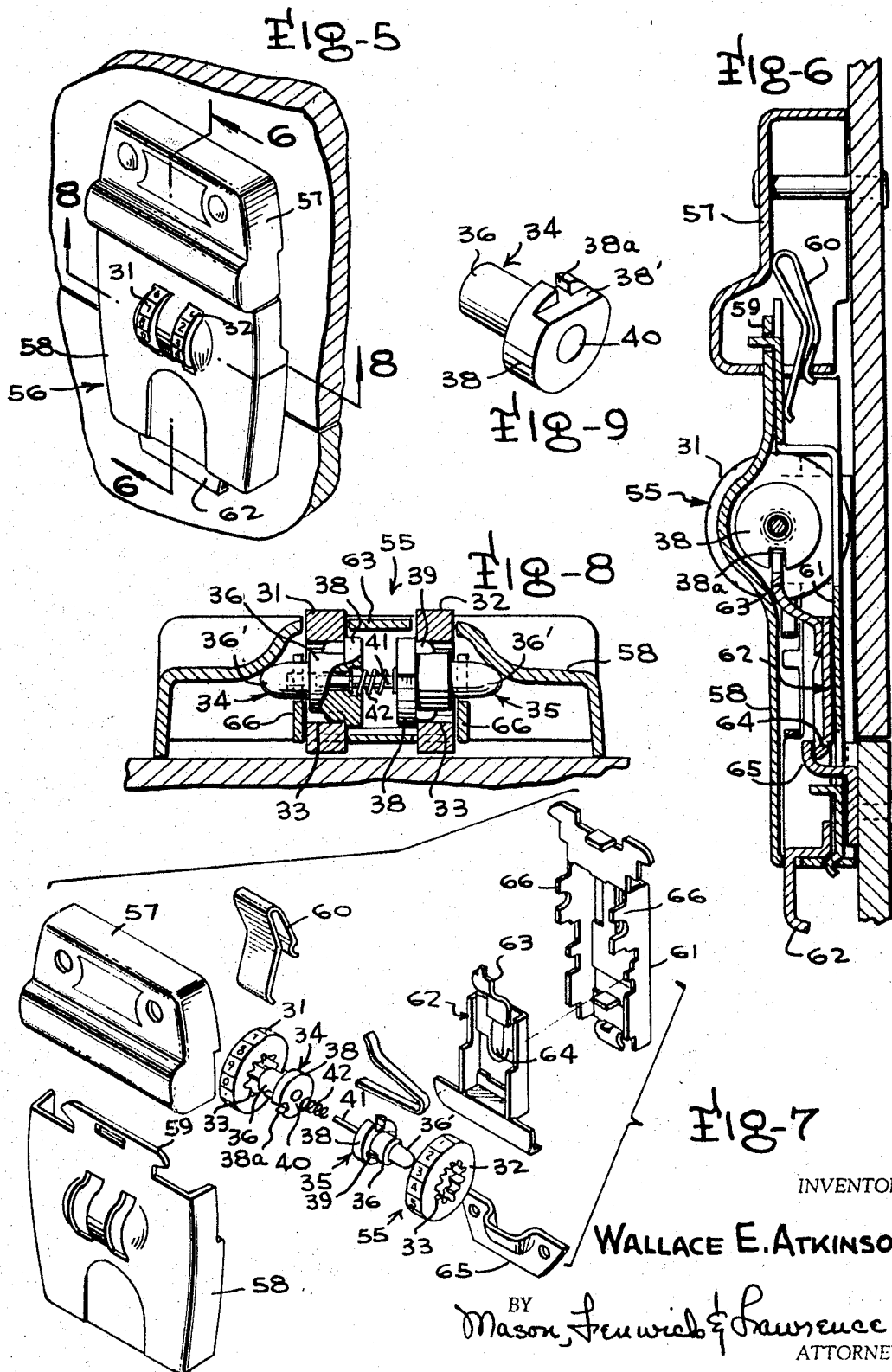
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COMBINATION LOCK MECHANISM FOR LUGGAGE LATCHES AND THE LIKE

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12 Claims

ABSTRACT OF THE DISCLOSURE

A combination lock mechanism for luggage latches and the like, which includes a pair of circular dial wheels spaced along a common axis and a pair of integral gating spindle members forming axles for the dial wheels. The spindle members are intercoupled by peg and socket means along the axis for relative converging and diverging movement, being biased outwardly, and have interlock formations which couple with their associated dial wheels at any of a plurality of relative angular positions at their outer limit positions and which free the dial wheels for relative angular adjustment to new combination positions at inwardly spaced axial positions of the spindle members.

The present invention relates in general to a combination lock structure involving a plurality of rotatable combination dial members adapted to be individually set to a predetermined combination of dial numbers, for use in a wide variety of lock applications, including lock mechanisms for luggage receptacles having separable parts to be releasably secured in closed position.

While combination locks have been used for many years in a wide variety of locking applications, such combination locks in the main have been of relatively complex and expensive construction, involving a plurality of peripherally gated tumbler wheels operated from a single dial. The present invention is concerned with a simpler version of combination locking mechanism suitable for less costly locking applications, wherein a plurality of dial members, each of which is adapted to be angularly positioned to a predetermined combination number, are associated in luggage locks and similar applications in a variety of ways to selectively lock or release a movable fence member of the luggage lock, and wherein the operator can readily change the combination of the lock when the lock is in an unlocked condition.

An object of the present invention is the provision of a novel combination lock construction applicable to a wide variety of installation conditions, which is relatively simple in its construction, secure in its operation, and involves substantial savings in manufacturing costs due to the reduced number of separate parts.

Another object of the present invention is the provision of a novel combination lock construction involving a pair of coaxially aligned, individually adjustable dial members for a two number combination, which involves a novel dial assembly construction readily permitting changing of the combination in a simple manner when the lock is in an unlocked condition.

Another object of the present invention is the provision of a novel combination lock mechanism of the type described in the immediately preceding paragraph, adapted to be housed in an arcuately movable latch section of a luggage lock housed in a concave well to normally lie substantially flush with the adjacent surface of the associated luggage.

Another object of the present invention is the provision of a novel combination lock mechanism of simplified construction which is readily adaptable for incorporation in pivoted hasp type luggage locks.

Other objects, advantages and capabilities of the present invention will become apparent from the following detailed description, taken in conjunction with the accompanying drawings illustrating two preferred embodiments of the invention.

In the drawings:

FIGURE 1 is an exploded perspective view of a luggage latch incorporating the combination lock mechanism of the present invention;

FIGURE 2 is a horizontal longitudinal section view of the latch unit taken along the line 2—2 of FIGURE 1;

FIGURE 3 is a vertical section view of the luggage latch and combination lock mechanism, taken along the line 3—3 of FIGURE 2;

FIGURE 4 is an exploded perspective view, to enlarged scale, of the combination lock mechanism employed in the luggage latch of FIGURES 1 and 2;

FIGURE 5 is a front perspective view of a pivoted hasp type luggage latch incorporating the combination lock mechanism of the present invention;

FIGURE 6 is a vertical section view through the pivoted hasp type luggage latch of FIGURE 5, taken along the line 6—6 of FIGURE 5;

FIGURE 7 is an exploded perspective view of the pivoted hasp type latch unit of FIGURE 5;

FIGURE 8 is a horizontal section view showing details of the combination lock mechanism employed in the latch unit of FIGURE 5, taken along the line 8—8 of FIGURE 5, and

FIGURE 9 is a perspective view of a modified form of spindle member that may be used in the combination lock mechanism.

Referring to FIGURES 1 to 4, inclusive, the combination lock mechanism of the present invention is shown incorporated in a luggage latch unit of the general type disclosed in my earlier U.S. Patent No. 3,266,275, granted Aug. 16, 1966. Since the details of construction of that luggage latch unit are specifically described in my earlier patent, only so much of the structure as is necessary to an understanding of the present invention will be described here.

The luggage latch unit, indicated generally by the reference character 10, includes a latch section 11, which may, for example, be mounted on a tray or body portion of a luggage case, and a keeper 12 which may be mounted on the separable cover section of the luggage case. Such latch section and keeper are usually mounted on the front wall of their respective receptacle sections adjacent the plane of separation between the receptacle body and the cover. The latch section 11 comprises a housing member 13 defining a front frame portion 14 of laterally or

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horizontally elongated, generally rectangular configuration, and a rearwardly projecting well portion 15, defining a forwardly opening well in the configuration of a segment of a cylinder concentric with a vertical axis located forwardly of the front frame portion 14 and substantially centered between the opposite lateral ends or vertical edges of the frame portion 14. The housing member 13 is adapted to be mounted in the body portion of the luggage by projecting the well portion 15 through a suitable accommodating opening cut in the front wall of the luggage body until the frame portion 14 butts against the front surface of the luggage wall. Disposed within the well portion 15 is a movable latch member 16 of corresponding configuration to the well defined by the well portion 15, adapted to be rotated through a small arc therein and displaced laterally through a short distance during such rotation to release the cooperating keeper 12. This movable latch member 16, in one convenient embodiment, includes a front wall 17 of substantially planiform rectangular configuration having circular segmental top and bottom flanges 18, 19, extending rearwardly therefrom along substantially parallel planes and conforming closely to the curvature and configuration of the well defined by well portion 15 in horizontal section to nest therein in the normal latched condition of the latch member 16, with the front wall 17 substantially flush with the frame portion 14. The top and bottom flanges 18, 19 are provided with slightly elongated curved slots 20 concentric with the axis of rotation of the concave inner wall of the well portion 15, aligned with circular apertures 21 in the top and bottom walls of the well portion 15 to receive a rivet 22 defining the pivot and latch axis of the latch member 16. The top flange 18 is also provided with a keeper aperture 23 having an enlarged portion and a constricted portion. The enlarged portion of the keeper aperture 23 is sized in accordance with the cross section of the tongue on the keeper 12, while the constricted portion of the keeper aperture 23 corresponds to the smallest cross section of the groove or kerf of the keeper tongue 12. A keeper aperture is also provided in the top wall of the well portion 15 corresponding substantially in cross section to the enlarged portion of the keeper aperture 23.

The latch member 16 also has a boss formation 24 at one end thereof, providing a rearwardly opening socket 24a for housing the spring and ball of a spring check mechanism 25, the ball of which is resiliently urged rearwardly toward the concave inner wall of the well portion 15 to seat in either detents 26, 26' and frictionally restrain the latch member 16 in either the latching position shown in solid lines in FIGURE 2 or the unlatched position indicated in broken lines in FIGURE 2.

In place of the key lock unit, disclosed in my earlier Patent No. 3,266,275, the novel combination lock mechanism, indicated generally by the reference character 30, is employed in the latch member 16 to lock the same in the latching position, shown in solid lines in FIGURE 2. The combination lock mechanism 30, as is more clearly illustrated in FIGURES 3 and 4, comprises a pair of like, thin cylindrical dial member or discs 31, 32 having dial marking lines and dial numerals on the peripheries thereof so as to be visible to the operator from the front of the latch unit, each having an axial bore 33 extending therethrough, provided with a plurality, for example 10, concave notches in the inwardly facing surface thereof. Cylindrical segment portions of the dial members 31, 32 project through accommodating slots in the front wall 17 of the latch member so as to be visible from externally of the latch unit and be manually operable to different angular positions. The dial members 31, 32 are journaled within the latch member 16 in coaxial relation along a common axis by a pair of spindle members 34, 35 respectively associated with the dial members 31, 32. Each of the spindle members 34, 35 has a relatively smaller diameter hub portion 36, which in the embodiment

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shown in FIGURES 1-4 is of sufficient axial extent to project entirely through the axial bore 33 of the associated dial member and extend therebeyond into aligned journal apertures 37 in the top and bottom flanges 18, 19. Adjoining the hub portions 36 of each of the spindle members 34, 35 and integrally included therewith is an enlarged collar formation 38 of a larger diameter than the minimum diameter of the bore 33 adapted to butt against the inner confronting faces of the dial members 31, 32. A plurality of eccentrically located, axially elongated interlocking pins, shown in the illustrated example as a diametrically opposed pair of pins 39, project axially from the collar formations 38 to be received in the inwardly facing surfaces of the bores 33 of the dial members to interlock the dial members and their respective associated spindle members against relative angular movement at any of ten selected angular positions corresponding to the ten dial numbers on the periphery of the dial members. One of the spindle members, for example, the spindle member 34, has an axially elongated central socket 40 opening toward the spindle member 35, and the spindle member 35 has an axially elongated peg member or portion 41 extending toward the spindle member 34 to be received in the socket 40. Surrounding the peg member 41 is a coil spring 42 bearing against the confronting surfaces of the collar formations 38 of the two spindle members 34, 35 to resiliently bias the spindle members away from each other into interlocked relation within their respective dial members 31, 32.

The collar formations 38, in the herein-described embodiment, have a flat or relieved portion 38' at a selected angular position along each of the collar formations 38, coacting with a pivoted fence member 43 to permit such movement of the latter when the dial members are at the selected angular positions corresponding to the chosen combination, to permit movement of the fence member to a position releasing the latch member 16 for arcuate movement to unlatched position. The fence member 43, in the illustrated embodiment, is in the form of a fence lever simply formed of a stamping of sheet metal having a pair of upwardly struck lugs 44 at a selected position along the body 45 thereof to receive a pivot pin or rivet 46 therebetween journaled at its opposite ends in the top and bottom flanges 18, 19 of the latch member 16. One end of the fence lever body 45 is provided with a tab 47 turned at right angles to the body 45 to project into a coil spring 48 bearing against the front wall 17 of the latch member 16 and continuously bias the fence lever 43 in a counter-clockwise direction, as viewed in FIGURE 2. The opposite end of the fence lever body 45 is provided with a flange 49 extending oppositely to the tab 47, normally projecting through an aperture or slot 50 in the concave inner wall of the well portion 15 to lock the latch member 16 against relative arcuate movement with respect to the housing member 13.

When the dial members 31, 32 do not occupy the angular positions corresponding to the selected combination of the lock, portions of the collar formations 38, other than the flat or relieved portions 38' thereof, bear against the fence lever body 45 and restrain the fence lever in the locking position wherein the flange 49 projects through the aperture 50. However, when the dial members 31, 32 are properly angularly disposed in accordance with the selected combinations of the lock, the flats of the collar formations 38 face the fence lever body 45 and permit counter-clockwise arcuate movement of the same about the pivot pin 46, due to the bias of the spring 48, to a position withdrawing the flange 49 from the aperture 50 and freeing the latch member 16 for arcuate movement within the housing member 13. Finger pressure on the opposite end of the latch member 16 relative to the end portion housing the combination lock mechanism will thereupon permit rotation or angular movement of the latch member in respect to the well portion 15 to the broken line position illustrated in FIGURE 2, where-

upon the ball of the spring check mechanism 25 will seat in the detent 26'. This movement of the latch member 16 withdraws the constricted aperture portion of keeper aperture 23, which normally laps across part of the keeper aperture in the top wall of the housing member 13 and projects into the keeper slot, from registry with the keeper slot and disposes the enlarged keeper aperture portion in registry with the keeper aperture, freeing the keeper tongue for withdrawal.

It will be noticed that when the latch member 16 is in this arcuately displaced, unlatching position, the journal openings in the top and bottom flanges 18, 19 journaling the ends of the hub portions 36 of the spindle members 34, 35 are exposed forwardly of the housing member frame portion 14. The combination can be simply changed when the latch mechanism is in this condition by inserting a pin or suitable instrument in the journal apertures housing the ends of the spindle member hub portions 36 to displace one or both of the spindle members 34, 35 axially inwardly toward the region between the dial members 31, 32 for a sufficient axis distance to decouple the interlocking pins 39 from the notches in the bores 33 of the dial members 31, 32. Thereupon, the decoupled dial member can then be rotated to a new angular position, establishing a new combination for the lock, and the spindle members allowed to return axially outwardly to interlocked condition with the dial members to again intercouple them against relative angular movement. It will also be observed that in this unlatched or broken line position of latch member 16, the fence lever 43 is restrained in its counter-clockwise displaced position by abutment of the flange 49 with the forward surface of the concave rear wall of well portion 15. This retains the body portion 45 of the fence lever in contact with the flaps 38' of the collar formations 38 and thus holds the spindle members 34, 35 and the dial members 31, 32 intercoupled therewith against rotation while the latch member 16 is displaced from latched position, and prevents accidental rotation of the dial members from their proper combination positions.

FIGURES 5, 6, 7 and 8 illustrate a combination lock mechanism, herein indicated by the reference character 55, which is substantially identical to the combination lock mechanism 30 of the previously described embodiment, incorporated in a luggage latch unit of the pivoted hasp type, such as that disclosed in my earlier U.S. Patent No. 2,912,844, granted Nov. 17, 1959. Again, only minimal reference to the structure of the luggage latch mechanism is needed, because of its detailed disclosure in my earlier patent.

The pivoted hasp type luggage latch unit, indicated generally by the reference character 56, may be generally described as comprising a hasp plate member 57, formed from sheet metal and adapted to receive rivets for mounting the hasp plate member onto the lid of a suitcase or the like, to which is pivoted a hasp body 58, likewise formed from sheet metal, providing a front wall, side walls and a bottom wall, giving the hasp an appearance of substantial thickness and forming with the front wall a rearwardly and upwardly opening casing for the reception of the lock works. An integral tongue 59 projects upwardly from the upper edge of the front wall of the hasp body 58 and has a pair of oppositely projecting ears extending from the lateral edges of the tongue and a narrow transversely extending slot located at the center of the tongue for pivotally coupling the hasp body to the hasp plate member 57 by means of a bent flat spring 60, all in the manner more completely described in my earlier Patent No. 2,912,844. An elongated box-like casing 61, formed from sheet metal, and substantially duplicating the box-like casing 30, described in my said earlier patent, is disposed within the hollow of the hasp body 58 to house a slidable fence 62 for rectilinearly sliding movement within the casing 61. The fence 62 corresponds substantially to the push member 31 of my

said earlier patent, except that a fence member 63 in the form of an upwardly projecting tongue of sheet metal, is formed on the slidable fence 62 in the upper region thereof to coact with the combination lock mechanism 55 in a manner to be described. The slidable fence 62 has a latch tongue 64, like the latch tongue on the push member described in my earlier patent, adapted to selectively interlock with a keeper member 65, like the keeper of my said earlier patent.

The casing 61 corresponds to the casing 30 of my earlier Patent No. 2,912,844, except that in the upper region thereof, the side walls have a slightly different configuration to provide journal brackets 66 defining concave journal recesses for journaling the combination lock mechanism 55.

The combination lock mechanism 55 of this embodiment is in most respects identical to the combination lock mechanism 30 of the embodiment illustrated in FIGURES 1-4, and includes a pair of cylindrical dial members or wheels 31, 32 arranged in axially spaced relation along a common axis with their outermost circular surfaces located immediately inwardly of the journal brackets 66 of casing 61 and constrained thereby against further axial separation. The dial members or dial wheels 31, 32 are identical to those described in the earlier embodiment, having an axial bore 33 therethrough, provided with a series of 10 concave notches in the inwardly facing surface of the central opening or bore 33. The bore 33 of each of the dial members 31, 32 receives a hub portion 36 of a respective one of the spindle members 34, 35 in the same manner as in the previously described embodiment, the larger collar formation 38 abutting against the inwardly facing circular surfaces of the dial members 31, 32 and the interlocking pins 39 engaging in a pair of the concave notches in the inwardly facing surfaces of the bores 33 to couple each dial member in a selected angular relation to its associated spindle member. The peg member 41 of the spindle member 35 projects a short distance into the socket 40 of the spindle member 34 in the normal outwardly biased, coupled positions of the spindle members, the peg member 41 being surrounded by the coil spring 42 bearing against the two spindle members and urging them outwardly into coupled relation with their respective dial members. The specific configuration of the hub portions 36 of the spindle members of the embodiment of FIGURES 5-8 differs slightly from the spindle members of the previously described embodiment in that smaller diameter spindle extensions 36' protrude outwardly from the dial members 31, 32 beyond the hub portions 36 to be received in and journaled by the concave recesses in the journaled brackets 66 and thereby journal the dial member and spindle member assemblies about the common axis defined by the journal brackets 66. It will also be noted that the collar formations or outwardly off-set shoulders 38 in the embodiment of FIGURES 5-8 are provided with slot-like gating recesses 38a, rather than the flats 38' of the preceding embodiment, to be aligned with and receive the free edge portions of the fence member 63 of slidable fence 62 when the dial member and spindle member assemblies occupy the proper angular positions for the selected dial combination, so as to permit upward sliding movement of the slidable fence 62 upon manual pressure upon the lower finger piece portion thereof for withdrawal of the latch tongue 64 from the keeper and release of the luggage latch unit.

The combination lock mechanism 55 of the embodiment of FIGURES 5-8 may also be manipulated to effect a combination change when the luggage latch unit is in open or unlatched condition, since the spindle extensions 36' projecting through the journal recesses in the journal brackets 66 are exposed to manipulation from the underside of the pivoted hasp body 58 in the unlatched condition thereof. The operator need only press axially inwardly upon the spindle extension 36' of either or both

of the spindle members 34, 35 to force the same axially inwardly against the bias of the spring 42 until the interlocking pins 39 are withdrawn from the concave bores in the inwardly facing surfaces of the dial member bores 33, and the dial member or members can thereupon be rotated to a new angular position establishing a new combination, at which the dial member will be interlocked with its associated spindle member upon release of the spindle members for outward axial movement to their normal positions. Of course, in both embodiments the axial extent of the socket 40 is sufficient to normally receive at least the free end portion of the peg member 41 therein when the spindle members occupy their normal outer limit positions, and to also accommodate axial movement of the peg member 41 further into the socket 40 to a sufficient extent to permit release of the interlocking pins 39 of at least one of the spindle members from the concave interlocking notches of the associated dial member.

It will be apparent that various shapes of gates for relieved portions of the collar formations 38 may be chosen to adapt the combination lock assemblies to various types of fences, either of the sliding or pivoted type. For example, the collar formation 38 may be of compound configuration providing the slot-like gates 38a in a first zone of each collar formation nearest the hub portion and providing a flat gating recess 38' in the zone of the collar formation 38 more remote from the hub portion 36, as illustrated in the fragmentary perspective view of FIGURE 9, to provide a dial member and spindle member assembly of broad application suitable for use with sliding fence members or with pivoted fence members.

The dial members 31, 32 can be resiliently indexed or detented to frictionally restrain them at the angular positions to which they are manually adjusted by the operator by any conventional means if desired, such, for example, as by spring detent fingers mounted on stationary supports and bearing upon the peripheries of the dial members to engage dial marking lines inscribed on the dial member peripheries, or by any other desired conventional detenting means, although it will be appreciated that provision of indexing or detenting means for the dial members is not necessary.

While but two specific embodiments of the present invention have been particularly shown and described, it will be apparent that various modifications may be made therein within the spirit and scope of the invention.

What is claimed is:

1. A combination lock mechanism for a latch having a fence member movable between latching and unlatching positions, comprising a pair of rotatable dial wheels disposed in axially spaced coaxial relation along a common axis of rotation flanking a center reference plane therebetween, each having an indicial bearing periphery and a central opening therethrough, a pair of gating spindle members having axially displaceable rotatable journal portions interconnecting them along said common axis for converging and diverging movement relative to said center plane, each of said spindle members including an enlarged head portion providing a stop shoulder on each of the respective spindle members which stop shoulders face in opposite direction and bear outwardly relative to said center plane against mutually confronting faces of the dial wheels facing said center plane to limit outward movement thereof and a hub portion integral with the respective head portions, the hub portions extending oppositely from the respective head portions relative to said center plane into said central openings to form axially movable axles for the dial wheels, means resiliently biasing the spindle members to their outer limit positions, releasable coupling means normally intercoupling the dial wheels with their associated spindle members for corresponding rotation at the outer limit positions thereof in any of a plurality of relative angular positions and

decoupling the same for independent angular adjustment of the dial wheels upon selected inward axial displacement of the spindle members, and said head portions including surface portions disposed to prevent unlatching movement of the fence member and having gates disposed to admit unlatching movement of the fence member at selected angular positions of the spindle members conforming to a selected combination of the lock.

2. A combination lock mechanism for a latch having a fence member movable between latching and unlatching positions, comprising a pair of rotatable dial wheels disposed in axially spaced coaxial relation along a common axis of rotation, each having an indicial bearing periphery and a central opening therethrough, a pair of gating spindle members having axially displaceable rotatable journal means interconnecting them along said common axis for relative converging and diverging movement and each including enlarged head portions providing stop shoulder means to bear outwardly against mutually confronting faces of the dial wheels to limit outward movement thereof and a hub portion integral therewith extending relatively oppositely from the respective head portions into said central openings to form axially movable axles for the dial wheels, means resiliently biasing the spindle members to their outer limit positions, releasable coupling means normally intercoupling the dial wheels with their associated spindle members for corresponding rotation at the outer limit positions thereof in any of a plurality of relative angular positions and decoupling the same for independent angular adjustment of the dial wheels upon selected inward axial displacement of the spindle members, and said head portions including surface portions disposed to prevent unlatching movement of the fence member and having gates disposed to admit unlatching movement of the fence member at selected angular positions of the spindle members conforming to a selected combination of the lock, one of said spindle members including a constricted diameter peg formation extending axially from the head portion in opposite relation to the hub portion thereof, and the other spindle member having an axially elongated socket opening toward said peg formation and forming said journal means therewith, said socket having a diameter substantially conforming to said peg formation and an axial depth to accommodate relatively converging axial movement of the spindle members over a range adequate to decouple the releasable coupling means of at least one of the associated dial wheels and spindle members.

3. A combination lock mechanism as defined in claim 2, wherein said head portions have inwardly facing, mutually confronting faces, said socket opening through one of said faces and said peg formation extending from the other of said faces into said socket, a coil spring means surrounding said peg formation and bearing at its opposite ends on said confronting faces in compressed relation therebetween to bias said spindle members in opposite direction along said common axis.

4. A combination lock mechanism as defined in claim 3, wherein said head portion is a generally annular enlargement at one end of the hub portion of each respective spindle member providing a generally cylindrical periphery disposed adjacent the fence member to prevent unlatching movement of the latter, said head portion having a gating recess defining said gate interrupting said periphery at a selected angular zone thereof to admit unlatching movement of the fence member when positioned adjacent the latter.

5. A combination lock mechanism as defined in claim 2, wherein said head portion is a generally annular enlargement at one end of the hub portion of each respective spindle member providing a generally cylindrical periphery disposed adjacent the fence member to prevent unlatching movement of the latter, said head portion having a gating recess defining said gate interrupting

said periphery at a selected angular zone thereof to admit unlatching movement of the fence member when positioned adjacent the latter.

6. A combination lock mechanism as defined in claim 4, wherein said hub portions of said spindle members are of a length to extend entirely through the central openings of said dial wheels and project therebeyond, journal means having journal apertures receiving and supporting the portions of said hub portions projecting beyond said dial wheels for rotary and axial movement therein, said journal means being carried by movable portions of the latch device disposing the outer ends of the hub portions in exposed positions accessible to axially inward manipulation by a tool for decoupling the dial members from their associated spindle members when the latch device is in unlatching position and disposing said outer ends in inaccessible position in the latching position of the latch device.

7. A combination lock mechanism as defined in claim 2, wherein said hub portions of said spindle members are of a length to extend entirely through the central openings of said dial wheels and project therebeyond, journal means having journal apertures receiving and supporting the portions of said hub portions projecting beyond said dial wheels for rotary and axial movement therein, said journal means being carried by movable portions of the latch device disposing the outer ends of the hub portions in exposed positions accessible to axially inward manipulation by a tool for decoupling the dial members from their associated spindle members when the latch device is in unlatching position and disposing said outer ends in inaccessible position in the latching position of the latch device.

8. A combination lock mechanism as defined in claim 1, wherein said hub portions of said spindle members are of a length to extend entirely through the central openings of said dial wheels and project therebeyond, journal means having journal apertures receiving and supporting the portions of said hub portions projecting beyond said dial wheels for rotary and axial movement therein, said journal means being carried by movable portions of the latch device disposing the outer ends of the hub portions in exposed positions accessible to axially inward manipulation by a tool for decoupling the dial members from their associated spindle members when the latch device is in unlatching position and disposing said outer ends in inaccessible position in the latching position of the latch device.

9. A combination lock mechanism as defined in claim 1, wherein said fence member comprises an elongated lever pivoted intermediate its ends on a pivot axis par-

alleling and spaced eccentrically of said common axis, means biasing said lever to urge a portion thereof against the peripheries of the head portions of both said spindle members, stationary means adjacent said lever interengaging the same to prevent movement of the lever pivot axis relative thereto when the lever is positioned against larger radius regions of the head portion periphery, and said head portions each having a recessed region along the periphery thereof defining a gating to accommodate movement of said lever portion toward the common axis to a position withdrawing said lever from engagement with said stationary means when said spindle members occupy selected angular positions.

10. A combination lock mechanism as defined in claim 3, wherein said fence member comprises an elongated lever pivoted intermediate its ends on a pivot axis paralleling and spaced eccentrically of said common axis, means biasing said lever to urge a portion thereof against the peripheries of the head portions of both said spindle members, stationary means adjacent said lever interengaging the same to prevent movement of the lever pivot axis relative thereto when the lever is positioned against larger radius regions of the head portion periphery, and said head portions each having a recessed region along the periphery thereof defining a gating to accommodate movement of said lever portion toward the common axis to a position withdrawing said lever from engagement with said stationary means when said spindle members occupy selected angular positions.

11. A combination lock mechanism as defined in claim 1, including means for selectively holding said spindle members against rotation from said selected angular positions.

12. In a combination lock mechanism as defined in claim 1, wherein said fence member while in unlatching position is displaced from a first position to release the latch, means for holding said spindle members against rotation from said selected angular positions when said fence member is out of registry with said first position.

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