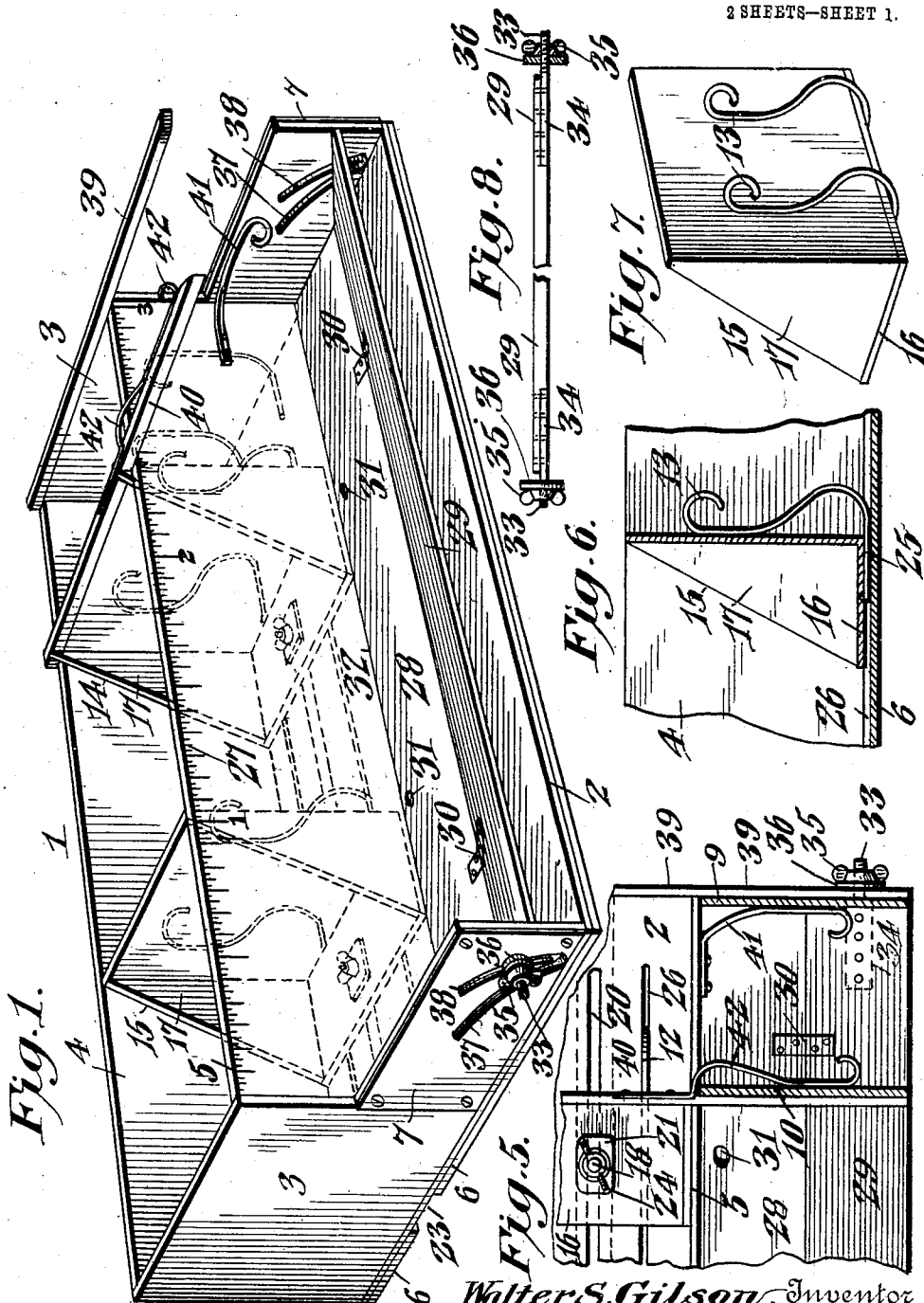


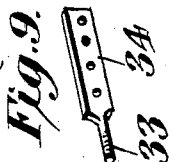
918,311.

W. S. GILSON.
TRUNK TRAY FORM.
APPLICATION FILED MAY 21, 1908.

Patented Apr. 13, 1909.
2 SHEETS—SHEET 1.



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TRUNK TRAY FORM.

Patented Apr. 13, 1909.

2 SHEETS—SHEET 2.

Fig. 2.

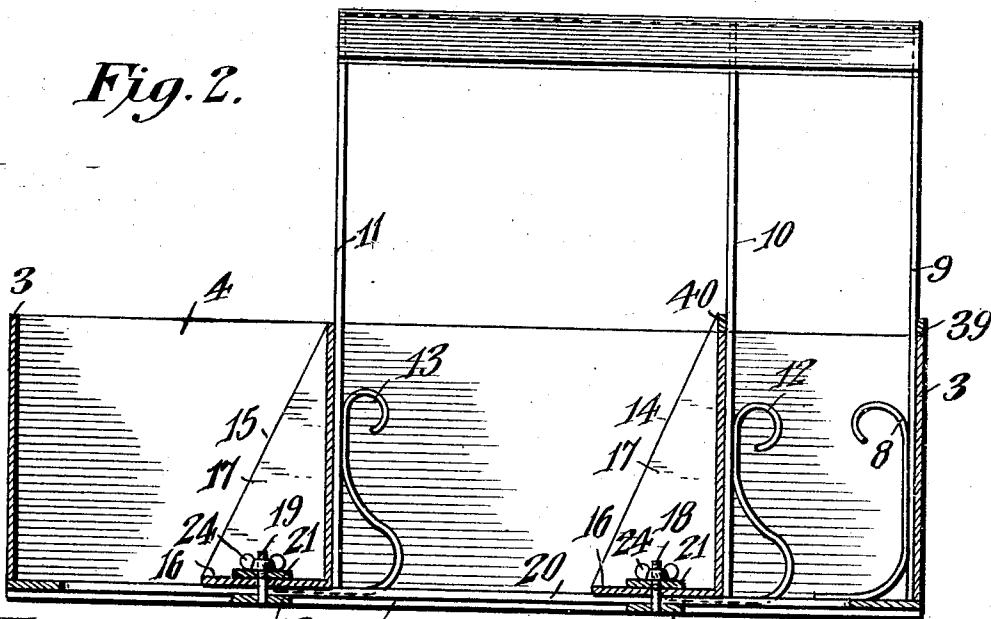


Fig. 3.

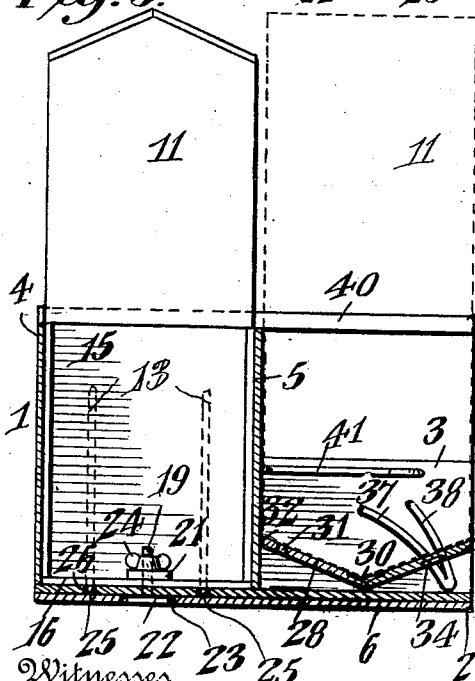
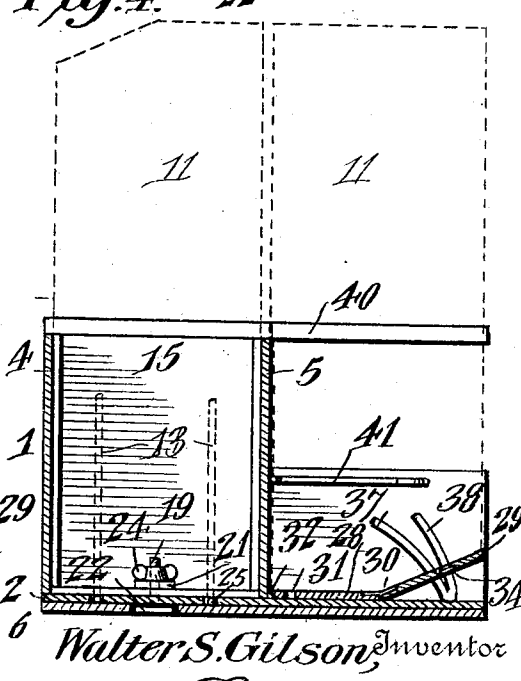


Fig. 4.



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UNITED STATES PATENT OFFICE.

WALTER S. GILSON, OF CHICAGO, ILLINOIS.

TRUNK-TRAY FORM.

No. 918,311.

Specification of Letters Patent.

Patented April 13, 1909.

Application filed May 21, 1908. Serial No. 434,184.

To all whom it may concern:

Be it known that I, WALTER S. GILSON, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Trunk-Tray Form, of which the following is a specification.

The invention relates to improvements in trunk tray forms.

The object of the present invention is to improve the construction of trunk tray forms, and to provide a simple, inexpensive and efficient trunk tray form, adapted to facilitate the assembling of the several parts of trunk trays, and capable of accurately and firmly holding the ends and partitions of trunk trays while the front and back strips are being fastened to the same, and adapted to be readily adjusted to accommodate trunk trays of different sizes and to the various shapes of the angular front portions of the same.

With these and other objects in view, the invention consists in the construction and novel combination of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended; it being understood that various changes in the form, proportion, size and minor details of construction, within the scope of the claims, may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings:—Figure 1 is a perspective view of a trunk tray form, constructed in accordance with this invention. Fig. 2 is a longitudinal sectional view of the same, illustrating the manner of clamping the ends and partitions of a trunk tray. Fig. 3 is a transverse sectional view, the adjustable front leaves or members being arranged for holding a trunk tray having both the upper and lower portions of its front inclined and arranged at an angle to each other. Fig. 4 is a similar view, the front leaves being arranged to support a trunk tray having only the upper portion of its front inclined. Fig. 5 is a plan view of a portion of the trunk tray form, the partition and one end of a trunk tray being in section. Fig. 6 is a detail sectional view of a portion of the trunk tray form, illustrating the construction of the adjustable gages. Fig. 7 is a detail perspective view of one of the adjustable gages. Fig. 8 is a detail view of the front or outer adjust-

able leaf, illustrating the arrangement of the means for securing it in its adjustment. Fig. 9 is a detail view of one of the threaded stems of the outer adjustable leaf.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

The trunk tray form comprises in its construction a box or casing 1, designed to be constructed of wood and having a horizontal 65 bottom 2, vertical end walls 3, a vertical rear wall 4 and a vertical partition 5, dividing the box or casing into a rear oblong compartment and an open front space or compartment. The bottom constitutes a platform, 70 and is preferably provided with a lower reinforcing board or layer 6, adapted to increase the strength and stability of the box or casing. The front portions of the end walls 3 are reduced in height, as shown, 75 the reduced portions being preferably reinforced by sheet metal plates 7 to prevent them from splitting. Although the box or casing is described as being constructed of wood, which is preferable on account of the cheapness and 80 lightness, it will be readily understood that the box or casing and the other parts may be constructed of any suitable material.

Within the rear oblong compartment is secured a pair of upwardly extending end 85 springs 8, adapted to secure the right hand wall 9 of a tray against the right hand end wall of the box or casing. The springs 8 are secured at their lower ends to the bottom of the box or casing, and they have approxi- 90 mately straight vertical portions for engaging the ends 9 of the tray, and their upper terminals are curved inwardly and downwardly, as clearly illustrated in Fig. 2 of the drawings. The partition 10 and the left 95 hand end 11 of the tray are clamped by springs 12 and 13 of the adjustable gages 14 and 15. Each of the adjustable gages 14 and 15 consists of a horizontal base 16, a vertical engaging portion, and approxi- 100 mately triangular side braces 17, secured to the vertical engaging portion and to the base and maintaining the former in proper position. The gages, which are adjustable longitudinally of the rear compartment, are se- 105 cured in their adjustment by means of set screws 18 and 19, operating in a longitudinal slot 20 in the bottom of the box or casing and provided with upper and lower washers 21 and 22. The bolts pass through perfora- 110

tions of the base of the gages, and the lower washers 22, which are preferably in the form of enlarged heads of the bolts, are arranged in a groove 23, formed by cutting the lower layer 6 of the bottom of the box or casing. The lower layer or thickness of the bottom, besides increasing the strength of the box or casing, is adapted to support the lower washers or heads 22 of the set screws out of contact with the bench or other supporting surface, upon which the trunk tray form is placed. The upper washers 21 engage the base or bottom portions of the adjustable gages, and the set screws 18 and 19 are equipped with winged nuts 24 for enabling the gages to be firmly secured in their adjustment. The springs 12 and 13 consist of approximately S-shaped upwardly extending portions and lower horizontal attaching portions 25, secured to the lower faces of the base or bottom portions of the adjustable gages, and operating in longitudinal slots or grooves 26 of the bottom. The springs 12 and 13 are adapted to clamp the partitions 10 and 11 firmly against the vertical engaging portions of the adjustable gages, as clearly shown in Fig. 2 of the drawings. The longitudinal partition 5 is provided at its upper edge with linear graduations 27 to provide a rule or measure for the adjustment of the gages.

The front space or compartment of the box or casing receives a pair of inner and outer adjustable leaves or members 28 and 29, extending longitudinally of the box or casing and connected together at their adjacent edges by hinges 30, adapted to permit the leaves or members to be arranged at an angle to each other. The inner leaf or member is provided with openings 31, forming handles for enabling the said inner leaf or member to be readily raised, and the inner edge 32, which is located contiguous to the partition 5, is beveled to facilitate the adjustment of the inner leaf or section and its arrangement at an inclination, as illustrated in Fig. 3 of the drawings. The inner leaf or section is arranged horizontally, as illustrated in Fig. 4 of the drawings, when the front of the trunk tray has only its upper portion inclined, and both of the leaves or members are arranged at an inclination to form a trough-like support, as illustrated in Fig. 3 of the drawings, when the front of the tray has both its upper and lower portions inclined. The outer leaf or member is equipped at its ends with projecting threaded stems 33, provided with attaching portions 34 let into the lower face of the outer leaf or member and arranged in flush relation with the said lower face. The threaded stems, which are provided with winged nuts 35 and washers 36, are adapted to operate in either arcuate or eccentrically arranged slots 37 and 38 of the front portions of the end

walls. When only the front leaf or member is arranged at an inclination, the outer slots 38, which are arcuate and concentric with the pintles of the hinges 30, are employed and the threaded stems operate therein. The slots 37 and 38 are connected at their lower ends, and the threaded stems are transferred from the slots 38 to the slots 37, when both the leaves or members are arranged at an inclination to form a trough-like support. The slots 37 are arranged eccentrically and permit the threaded stems to move inwardly with the adjustment of the inner leaf or member toward the longitudinal partition. As the inner leaf or member is moved inwardly and upwardly, it carries with it the outer leaf or member, and the eccentric arrangement of the slots 37 is for the purpose of accommodating the fastening means to the changing of the pivotal point of the outer leaf or member during such adjustment. The thumb or winged nuts of the threaded stems are adapted to clamp the leaves or members firmly in position when either or both are adjusted.

The right hand end wall 3 and the adjustable gage 14 are equipped with horizontally disposed forwardly projecting gage arms 39 and 40, extending the entire width of the box or casing and having beveled front ends for guiding the material into engagement with front springs 41 and 42. The gage arm 39 consists of a bar secured to the right hand end wall, as clearly shown in Fig. 1 of the drawings, and the other gage arm 40 also consists of a bar, which is secured to the vertical engaging portion and the bracing sides of the gage 14. The spring 41, which cooperates with the front portion of the right hand end wall of the casing, is disposed horizontally being secured at its rear end to the partition 5, and having its front end free and bent inwardly and rearwardly, as shown. The spring 42, which is also arranged horizontally, is secured at its inner or rear end to the adjustable gage arm 40, and its front end is free and bent forwardly on itself to facilitate the introduction of the material between the spring and the gage arm.

In assembling the parts of a trunk tray, the right hand end of the tray is placed in the right hand end of the rear space or compartment of the box or casing with the square end down, and it is clamped in such position by the springs 8, which hold the end of the tray firmly in a vertical position against the right hand end of the box or casing. The partition is placed, square end down, between the springs 12 and the vertical portion of the adjustable gage 14, and the left hand end of the tray is similarly arranged between the springs 13 and the vertical portion of the adjustable gage 15. The edges, which will be arranged at the top of the tray when the latter is completed are

placed at the back, or the farthest from the operator. The front of the tray is then nailed to the ends and to the partition, starting at the right hand end, then nailing the left hand end and lastly the partition. The parts of the trunk tray are then removed from the rear compartment of the box or casing, the front of the tray being turned forward and downward toward the operator, and in this position placed upon the support formed by the leaves or members, the latter having been previously adjusted to fit the front of the trunk tray. The right hand end of the tray is clamped by the spring 41 against the right hand end wall of the box or casing, and is supported in a vertical position by the forwardly projecting rigid gage arm 39. The partition is clamped between the springs 42 and the adjustable gage arm of the gage 14. The back of the tray may then be easily nailed to the previously assembled parts, starting at the right hand end then nailing the left hand end and lastly the partition. The gages are adjustable throughout the length of the box or casing to accommodate trays of different sizes, and the device will also be found advantageous in the framing of boxes where a partition is required.

Having thus fully described my invention, what I claim as new and desire to secure by Letters Patent, is:—

1. A trunk tray form including a box or casing having a compartment and provided with means for holding one of the end walls of a trunk tray in a vertical position, and adjustable gages extending across the compartment and provided with clamping means for holding the other end and a partition of the tray in a vertical position.

2. A trunk tray form including a casing having a compartment, an adjustable gage extending across the compartment and having a vertical engaging portion and provided with a clamping spring cooperating with the vertically arranged portion.

3. A trunk tray form including a casing having a compartment, an adjustable gage extending across the compartment and composed of a base, a vertical engaging portion, and connecting bracing means, and a spring cooperating with the vertical engaging portion of the gage.

4. A trunk tray form including a casing having a compartment, an adjustable gage extending across the compartment and having a base and provided with a vertical engaging portion, and a spring secured to the base and having a free engaging portion cooperating with the vertical portion of the gage.

5. A trunk tray form including a casing having a compartment, an adjustable gage extending across the compartment and having a vertical engaging portion, and a spring

secured to the gage at the bottom thereof and provided with an upwardly extending approximately S-shaped portion arranged to cooperate with the engaging portion of the gage.

6. A trunk tray form including a box or casing having a compartment and provided in its bottom with a groove, an adjustable gage extending across the compartment and having a bottom portion and provided with a vertical engaging portion, a spring consisting of a lower attaching portion secured to the bottom portion of the gage and operating in the said groove, and an upwardly extending engaging portion cooperating with the vertical engaging portion of the gage.

7. A trunk tray form including a box or casing having a compartment and provided with a longitudinal slot and having a bottom groove at the said slot, adjustable gages arranged within the box or casing and extending across the compartment and provided with engaging means for clamping an end wall and a partition of a trunk tray, and fastening devices operating in the slot and the groove for securing the gages in their adjustment.

8. A trunk tray form including a box or casing provided with an oblong compartment and having graduations, means located at one end of the compartment for clamping one end of a trunk tray, and adjustable gages arranged within and extending entirely across the said compartment and provided with means for clamping the other end and the partition of a trunk tray.

9. A trunk tray form including a box or casing provided with a rear compartment and having a front space or compartment, means arranged therein for supporting the angled front of a trunk tray, and a gage adjustably extending across the rear compartment and provided with a forwardly projecting gage arm extending over the front space or compartment.

10. A trunk tray form including a box or casing provided with a rear compartment and having a front space or compartment, means arranged therein for supporting the angled front of a trunk tray, a gage extending across the rear compartment and adjustably secured within the same and provided with a forwardly projecting gage arm extending over the front space or compartment, and a clamping spring mounted on and carried by the gage arm.

11. A trunk tray form including a box or casing provided with a rear compartment and having a front space or compartment, means arranged therein for supporting the angled front of a trunk tray, a gage adjustably secured within and extending across the rear compartment and provided with a forwardly projecting gage arm projecting over the front space or compartment, and a hori-

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zontal clamping spring secured at its inner or rear portion to the gage arm and having a front or outer clamping portion.

12. A trunk tray form including a support 5 having a hinged leaf or member, and means for holding the same at different angles or inclinations to fit the front of trunk trays.

13. A trunk tray form provided with a support including a pair of independently 10 adjustable leaves or members adapted to be arranged at different angles or inclinations to fit the angled front portion of a trunk tray.

14. A trunk tray form provided with a support including a pair of independently 15 adjustable leaves or members adapted to be arranged at different angles or inclinations to fit the angled front portion of a trunk tray, and a fastening device connected with one of the leaves or members and arranged to secure 20 both of the same in their adjustment.

15. A trunk tray form including a box or casing having a bottom and a vertical wall, a support composed of two leaves or members adapted to be arranged at different 25 angles or inclinations, one of the leaves or members being located adjacent to and adapted to be supported by the said wall, and securing means connected with the other leaves or members.

16. A trunk tray form including a box or casing having a vertical wall, a support composed of two leaves or members hinged together and adjustable independently of each other, one of the leaves or members being 35 arranged contiguous to and in position to be supported by the vertical wall, and securing means connected with the other leaf or member for holding both leaves or members in their adjustment.

17. A trunk tray form including a box or casing having a supporting wall and provided with arcuate and eccentric slots, a support composed of two leaves or members hinged together, one of the leaves or members being 45 arranged to be supported by the said wall, and a fastening device connected to the other leaf or member and operating in the said slots.

18. A trunk tray form including a box or 50 casing having a supporting wall and provided

with arcuate and eccentric slots connected together at one end, a pair of leaves or members hinged together, one of the leaves or members being arranged contiguous to and adapted to be supported by the said wall, and an adjustable fastening device carried by the other leaf or member and operable in the said slots and adapted to be transferred from one slot to the other to secure either one or both of the said leaves or members in their adjustment.

19. A trunk tray form including a box or casing having a back and end walls and provided with a partition dividing the box or casing and forming an open front space or 6 compartment, the end walls being extended in advance of the partition, supporting means arranged within the front space or compartment, a horizontal clamping spring secured to the partition and cooperating with the 7 extended portion of one of the end walls, a fixed gage arm projecting from the box or casing and located above the said spring, an adjustable gage mounted within the box or casing in rear of the partition and provided 7 with a projecting gage arm extending over the front space or compartment, and a clamping spring carried by the latter arm.

20. A trunk tray form including a box or casing having a back and end walls and provided with a longitudinal partition dividing the box or casing into a rear compartment and a front open space or compartment, an adjustable gage extending across the rear compartment and provided with a gage arm 8 projecting over the front space or compartment, a fixed gage arm mounted on the box or casing and extending over the front compartment, supporting means arranged within the front space or compartment, and a 9 clamping spring extending along the arm of the adjustable gage and carried by the same.

In testimony, that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

WALTER. S. GILSON.

Witnesses:

A. B. SIMON,
EDE HARNER.