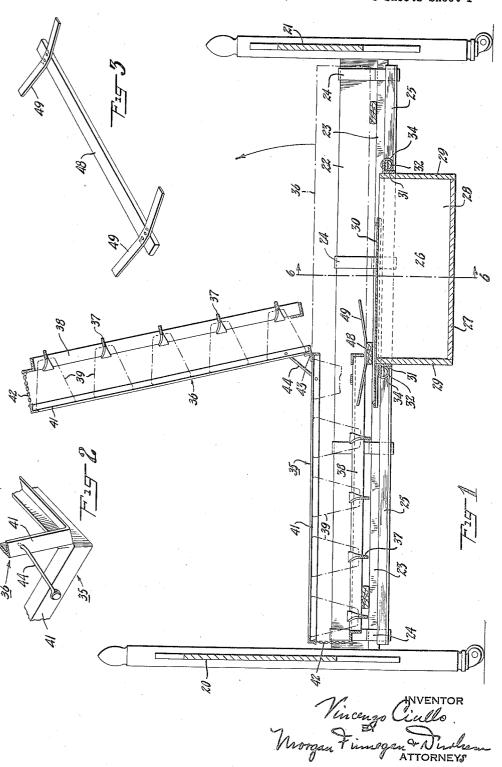
BED

Filed March 9, 1940

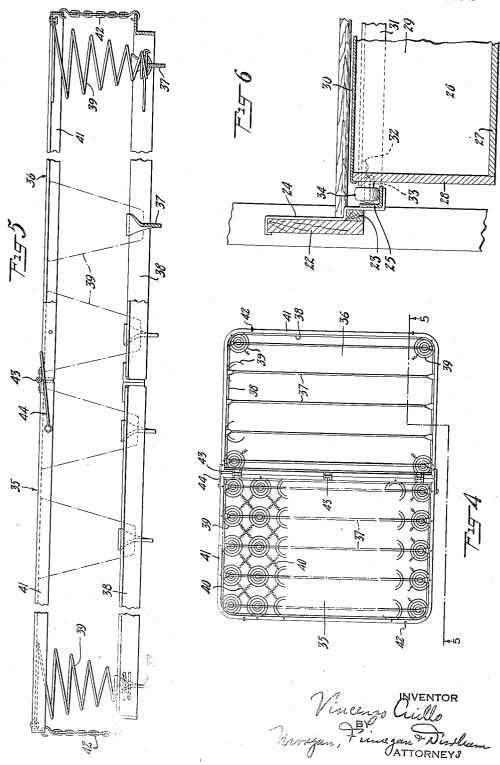
3 Sheets-Sheet 1



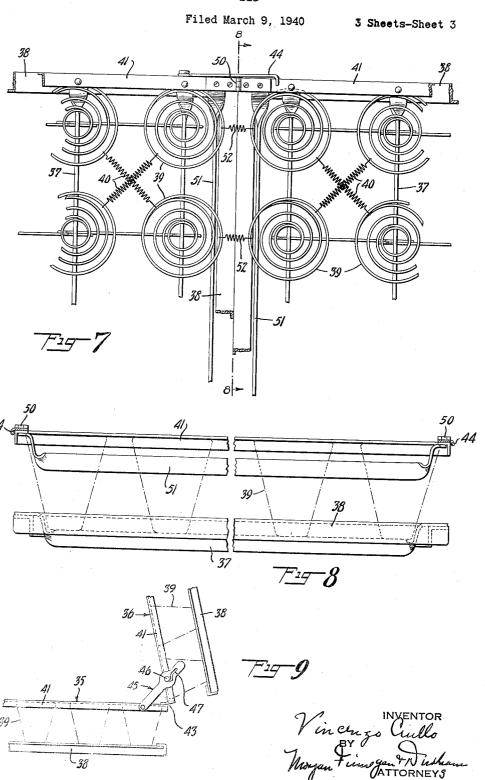
BED

Filed March 9, 1940

3 Sheets-Sheet 2



BED



UNITED STATES PATENT OFFICE

2,239,877

RED

Vincenzo Ciullo, Brooklyn, N. Y., assignor to Albert James Ciullo and Ralph Iacomino, jointly, both of Brooklyn, N. Y.

Application March 9, 1940, Serial No. 323,075

4 Claims. (Cl. 5-308)

This invention relates to beds and more particularly to beds having foldable springs and storage space in connection therewith.

One of the objects of this invention is to provide a bed with novel and improved storage com- -5 partment for bed clothes or other articles which is easily accessible from the top of the bed.

Another object is to provide such a compartment which will not hinder the cleaning of the floor under the bed.

A further object is to provide springs for a bed which may be folded into a compact unit for moving or shipping, and which may be partially folded and secured in such a position while still on the bed when access to the bed compartment 15 is desired.

A still further object is to provide a novel and improved set of springs which may be easily cleaned without being removed from the bed.

Further objects of the invention and novel fea- 20 tures of the construction will be apparent from the following specification when considered together with the accompanying drawings.

In accordance with the present invention a pieces and side members is provided with a storage compartment supported by said side members and longitudinally movable with respect thereto. A set of springs is furnished constructed in two sections, said sections being hinged together and 30 along the guide rails 25. foldable one upon the other, and means are provided for locking said sections in a partially folded position. Guide bars are attached to an ordinary bed slat to cooperate with the spring sections when the latter are moved from the fold- 35 ed to the horizontal position.

Referring now to the drawings:

Fig. 1 illustrates a bed with storage compartment, springs, and slat embodying the invention, the springs being shown in the partially 40 folded position;

Fig. 2 is a fragmentary view on an enlarged scale of one means for locking the spring sections in the partially folded position;

shown in Fig. 1;

Fig. 4 is a top plan view of the set of springs shown in Fig. 1, some parts being left out to show the construction more clearly;

Fig. 5 is a fragmentary view in side elevation 50 of an enlarged scale taken along line 5-5 of Fig. 4, showing particular features of the construction;

Fig. 6 is a fragmentary cross-sectional view on an enlarged scale taken along line 6-6 of Fig. 1; 55 upper plane of the set of springs. The coiled

Fig. 7 is a fragmentary top plan view on a much enlarged scale of a modification in the construction of the springs;

Fig. 8 is a fragmentary cross-sectional view taken along the line 8-8 of Fig. 7; and

Fig. 9 shows one variation in the construction of the locking means shown in Fig. 2.

As is shown in Fig. 1, a conventional bed construction comprises head piece 20, foot piece 21, and side members 22 on the inner sides of which are attached longitudinal slat supporting members 23. As best shown in Fig. 6, supported by and secured to side members 22 and members 23 are a number of support bars 24 being so formed as to fit flush against the top and inner side surfaces of said members 22 and 23 and to afford a support at their lower extremities for longitudinal guide rails 25 which are attached thereto and extend approximately the length of the bed.

The storage compartment indicated generally by reference numeral 26 comprises bottom 21, sides 28, ends 29, and cover 30 mounted on the top of the compartment and slidable longitudiconventional bedstead comprising head and foot 25 nally thereof. Right angular supporting members 31, fixedly attached near the top to the ends 29, bear at their opposite extremities the hangers 32 having fixed therein pins 33 on which rollers 34 are rotatably mounted and positioned to roll

> The set of springs is divided into two sections indicated generally by the reference numerals 35 and 36, the construction of the individual sections being that of any of the several well known types of bed spring. In the particular embodiment shown in Fig. 4 and Fig. 5 the cross members 37 are attached to the bottom frames 38 and support a plurality of coiled springs 39 which are maintained in a substantially vertical position by the horizontal cross-springs 40 and by attachment to the top frames 41, said frames being yieldably connected to bottom frames 38 by chain links 42.

The set of springs may be constructed accord-Fig. 3 is a perspective view of the center slat 45 ing to the modifications shown in Fig. 7 and Fig. 8, in order that a uniformly resilient supporting surface may be presented to the mattress used on the springs. To that end the top frames 41 are constructed substantially in the form of a U, and are hingedly attached at their open ends by hinges 50, adjacent to which on said top frames are attached the upwardly bent ends of the cross members 51, so that substantially the whole length of said cross members lies well below the springs 39 adjacent these cross members are attached across the line of fold of the spring sections by small springs 52, or by any other suitable linkage, so that said coiled springs will maintain their desired vertical position when the 5 sections are in the horizontal position,

In order to facilitate easy access to the storage compartment, as well as to permit either of the halves of the foldable set of springs to be rigidly held in a raised position while it is being cleaned, 10 means are provided for securely fastening the sections together in a definite relative angular relation with the raised half slightly overleaning the other half in its normal horizontal position and forming a relatively large acute angle 15 therewith. Not only do these fastening means hold the raised half against falling and the whole set of springs in a stable condition while in the partially folded position, but they also serve to hold the raised half against the resilient action 20 of the partially folded mattress which would otherwise tend to move the raised half to a position where it could fall. For this purpose sections 35 and 36 are foldably connected along the adjacent portions of their respective top frames 25 41 by hinges 43, and section 35 carries locking arm 44 for engagement in holes provided in top frame 41 of section 36. Another locking means is shown in Fig. 9 wherein locking arm 45 is engaged in groove 47 by pin 46 attached to section 30 36.

As shown in Fig. 3, upwardly bent transverse bars 49 are attached to center slat 48 relatively near the ends thereof, the distance between said bars 49 being the width of the set of springs.

With the construction shown it will be apparent that the storage compartment 26 may be easily rolled along the guide rails 25 to any desired position relative to the length of the bed may be positioned near the foot 2! or the head 20 when access to the compartment is effected by raising section 36 or section 35 respectively to the partially folded position. It will also be apparent that when spring section 36 is folded to lie upon the top of spring section 35, the set of springs will be in a compact form adopted for moving or shipping.

When the sections are moved to the partially folded position relative to each other and held 50in such position by the locking arm 44, it will be apparent that each section as it successively occupies the off-the-bed position may be easily dusted or washed. When the locking arms are disengaged and the set of springs folded back 55 into its normal position, the slat bars 49, being firmly anchored under the horizontal section, will engage the bottom frame 38 of the descending section while said section is still partially raised and exert a slight retarding force upon $_{60}$ said section, as well as act as guide and support to the descending section. Said slat bars will also curve slightly about the abutting portions

of the bottom frames 38 of the respective sections serving to retard folding, while chain links 42 provide for a certain maximum spaced relationship between bottom frames 38 and top frames 41, all of said means cooperating to maintain the sections in the normal horizontal position when the bed is in use.

While the invention has been described with considerable particularity, it will be appreciated by those skilled in the art that the invention is of wider application and not limited to the particular application described nor to the embodiment illustrated in the drawings.

What is claimed is:

1. The combination with a bed, provided with head and foot pieces and side members, of a storage compartment supported by said side members and longitudinally movable with respect thereto, a set of springs comprising framed sections foldably connected along their adjacent edges, said springs being foldable along a line extending transversely across the bed, and locking means for securing said sections in a partially folded position, one section slightly overhanging the other and forming a relatively large acute angle therewith.

2. The combination of a bed provided with head and foot pieces and side members, of a bed spring supported by said side members and foldable into two halves along a line extending transversely of said bed, longitudinal guide rails attached to said side members, a storage compartment between said guide rails and slidable therealong to be positioned beneath either half of the spring whereby access may be had to it or the floor beneath it with either half of the spring raised.

3. The combination of a bed provided with head and foot pieces and side members, of a bed spring supported by said side members and foldwhen it is desired to clean under the bed, and 40 able into two sections along a line extending transversely of said bed, locking means attached to said spring for securing said sections in a partially folded position, longitudinal guide rails attached to said side members, a storage compartment between said guide rails and slidable therealong to be positioned beneath either section of the spring whereby access may be had to it or the floor beneath it with either section of the spring raised.

4. The combination of a bed provided with head and foot pieces and side members, of a bed spring supported by said side members and foldable into two sections along a line extending transversely of said bed, longitudinal guide rails attached to said side members, a storage compartment between said guide rails and slidable therealong to be positioned beneath either section of the spring whereby access may be had to it or the floor beneath it with either section of the spring raised, and means beneath the line of division of said sections for supporting either section of the spring near said line of division.

VINCENZO CIULLO.