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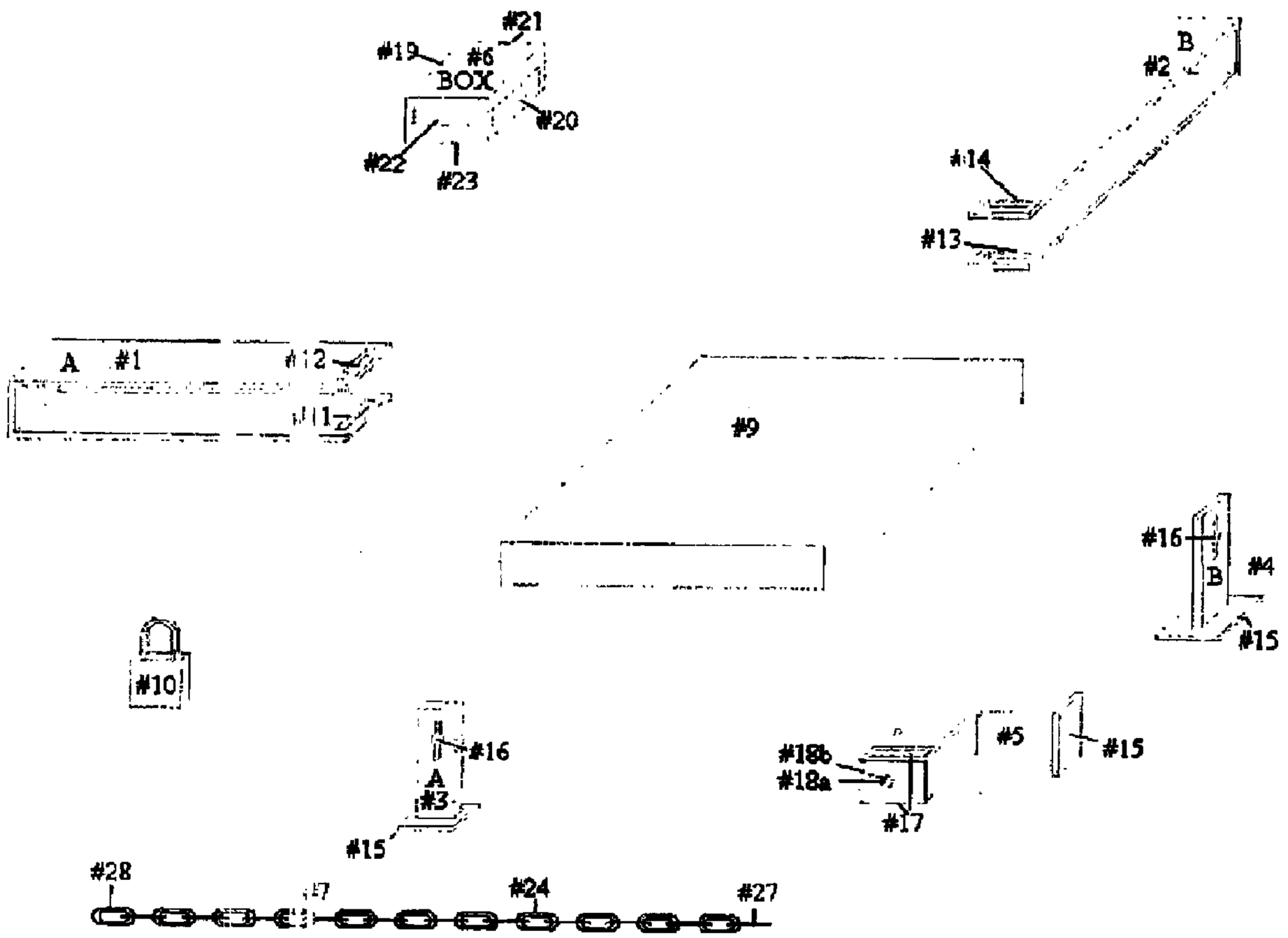

(57) Abrégé/Abstract:
An apparatus (figure 11) for preventing theft of portable computer and electronics equipment is disclosed. The mobile and portable security system, using a novel "Cross-U Lock Block" design, is an external containment structure not requiring any mounting

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(57) Abrégé(suite)/Abstract(continued):
system, or other device, connection, or securing substance on or in the protected device. The structural design, arrangement, and relationships, among all components function in exactly the same manner at all custom made and standard sizes, to achieve an effective anti-theft device. The device comprises 7 solid, uniquely designed members: "U- Bar A" (1); "U-Bar B" (2); "Stake A" (3); "Stake B" (4); Weave Bar" (5); U-Lock Block" (6); and "Chain" (7), which, when unassembled, nest together compactly for transport in the made to fit dual handle carrying case (8) and which, when assembled over a relatively small, expensive portable electronic device such as a laptop computer (9) and secured with a padlock (10) form the durable and novel "Cross-U Lock Block" configuration, providing an effective, visually presentable, highly mobile and convenient method for the prevention of theft of said device.

ABSTRACT

An apparatus (figure 11) for preventing theft of portable computer and electronics equipment is disclosed. The mobile and portable security system, using a novel "Cross-U Lock Block" design, is an external containment structure not requiring any mounting system, or other device, connection, or securing substance on or in the protected device. The structural design, arrangement, and relationships, among all components function in exactly the same manner at all custom made and standard sizes, to achieve an effective anti-theft device. The device comprises 7 solid, uniquely designed members: "U-Bar A" (1); "U-Bar B" (2); "Stake A" (3); "Stake B" (4); "Weave Bar" (5); "U-Lock Block" (6); and "Chain" (7), which, when unassembled, nest together compactly for transport in the made to fit dual handle carrying case (8) and which, when assembled over a relatively small, expensive portable electronic device such as a laptop computer (9) and secured with a padlock (10) form the durable and novel "Cross-U Lock Block" configuration, providing an effective, visually presentable, highly mobile and convenient method for the prevention of theft of said device.

COMPUTER & ELECTRONICS SECURITY SYSTEM

BACKGROUND OF THE INVENTION

FIELD OF THE INVENTION

The present invention relates generally to the field of anti-theft devices for the protection of relatively small but expensive pieces of electronic equipment including portable laptop computers. More specifically, the present invention relates to an externally fitting locking apparatus with a novel "Cross-U Lock Block" design. The structural design, arrangement, and relationships, among all assembled components of the easy to assemble and transport invention, function in exactly the same manner at all sizes made, and there are several standard sizes as well as custom made sizes.

DESCRIPTION OF THE PRIOR ART

Computers and electronics have evolved rather rapidly from large, expensive, stationary machines, useable only by a few, to relatively small, portable machines which are useable by many. In particular, the development of laptop computers, and related devices, with significant processing power has made computers and accessory electronic items available to the general population. It is now common for college, high school and even grade school students, as well as many employees at a variety of levels of in a wide range of companies, to have their own portable computer and transport and use it in a number of settings: at home; at work or school; and, in public. These valuable items are relatively small and easily transportable and an undesirable side effect of their proliferation is the fact that the theft of such items is a significant problem. Furthermore, because of the value of data stored within the devices (i.e. the software and data files) it is often the case that the time and cost associated with replacing stolen computers far outweighs their original purchase price.

A variety of devices have been developed to inhibit the theft of portable computer and electronics equipment. There are several personal computer security systems and anti-theft devices for electronics available to the public and known in the prior art. See,

for example, Canadian Patent #2205171, Canadian Patent #2082649, Canadian Patent #2246139, Canadian Patent #2271368, Canadian Patent #2281466, US Patent #5351507, US Patent #5836183, US Patent #5787738, US Patent #5642634, US Patent #5327752, and US Patent #5502989.

Since portable computer and electronics equipment vary by design and size, and since such security systems are often configured in a manner requiring the protected device to have a compatable component(s) on or built into it which may or may not exist and may or may not be the right size, shape or type, and since they sometimes employ a "nail it down to the desk" method to be set up, such systems, as well as being unsightly and unprofessional looking, may not be effective at all times, in all places, for all users, especially for those who regularly transport and use their devices in different places. Since also, along with traditional locking means, some of these security systems employ anchors that adhere to the case of a valuable device through a "super-bonder" glue or other adhesive - which are easily overcome by professional thieves using simple tools to pry them off, and, since also many of these systems, even the ones with complex and novel locking means, use flexible cables and cables with relatively small diameters - which can easily be cut with an accesible tool a seasoned thief stealing an expensive item would have and use, such systems are ineffective and insufficient.

There also exist various electronic alarm, identification and recovery products that either alert owners when they have been tampered with, or assist in tracking stolen merchandise. Of questionable reliability, these devices are expensive and do little to prevent theft. They may assist in the recovery of stolen items, however once a computer has been stolen the damage is irreversible since computers can be dismantled and sold for their component parts and the cost to the owner has already been inflicted. In the unlikely event that the computer is recovered, replacement and rebuilding of the data has already been necessary.

The principal difficulty in such systems is providing an effective, visually presentable, and convenient method for securing the equipment and its contents at any time and in any location.

SUMMARY OF THE INVENTION

The present invention aims to overcome, at least in part, some of the aforementioned problems. The assignee of this application has invented an externally fitting locking apparatus with a novel "Cross-U Lock Block" design. Conveniently, in its various custom built and standard sizes, the structural design, arrangement, and relationships, among all assembled components of the invention, function in exactly the same manner. The primary objectives of this invention, which will be made salient via detailed review of the specifications and drawings are: to provide a durable, strong and secure system for preventing the theft of expensive mobile and portable computer equipment and electronics devices; to make said invention able to be used with any make, model, shape and size of such products to be protected; to make said product independent of the need for any mounting system, or other connection, configuration or substance on or in the protected device; to make said product easy to assemble, use, disassemble, store and transport; to make said product relatively professional in appearance; and, to make said system compatable with any standard padlock or combination lock on the market today.

The present invention is comprised of 7 pieces plus its leather carrying case (8), as listed in Appendix A: "SECURITY DEVICE PIECES LIST" and introduced here. Each individual piece is made of welded, smoothed, coated mild steel, or a combination of similarly durable and strong materials. These 7 pieces are labelled "U-Bar A" (1), "U-Bar B" (2), "Stake A" (3), "Stake B" (4), "Weave Bar" (5), "U-Lock Block" (6), and "Chain" (7). It is easily assembled and disassembled by one person in any location (see Appendix B: "EIGHT EASY STEPS TO ASSEMBLE THE CROSS-U ANTI-THEFT DEVICE" and see the following information in "Detailed Description of Preferred Embodiment" for a full explanation).

BRIEF DESCRIPTION OF THE DRAWINGS

For a better understanding of the present invention and to show more clearly how it may be carried into effect, reference will now be made by way of example to the

accompanying drawings which show the preferred embodiment of the present invention in which:

Figure 1 is a front perspective view of piece Number 1, labelled "U-Bar A."

Figure 2 is a front perspective view of piece Number 2, labelled "U-Bar B."

Figure 3 is a blown up front perspective view of piece Number 3, labelled "Stake A."

Figure 4 is a blown up front perspective view of piece Number 4, labelled "Stake B."

Figure 5 is a blown up front perspective view of piece Number 5, labelled "Weave Bar" situated horizontally.

Figure 6 is a blown up front perspective view of piece Number 6, labelled "U-Lock Block" situated horizontally.

Figure 7 is a front perspective view of piece Number 7, labelled "Chain."

Figure 8 is a front perspective view of the empty carrying case to transport the unassembled items.

Figure 9 is a front perspective view of a laptop – an example of an item which can be protected by this invention (not supplied with this invention).

Figure 10 is a perspective view of a standard padlock – (not supplied with this invention).

Figure 11 is an exploded front perspective view of the assembled apparatus over a laptop computer.

Figure 12 is a front perspective view of U-Bar A and U-Lock Block in its assembled, unattached position. This configuration appears when user completes STEP 1 of the apparatus assembly steps.

Figure 13 is a front perspective view of U-Bar A and U-Lock Block in its assembled, attached to laptop position. This configuration appears when user completes STEP 2 of the apparatus assembly steps.

Figure 14 is a front perspective view of U-Bar A, U-Bar B and U-Lock Block in its assembled, attached to laptop position. This configuration appears when user completes STEP 3 of the apparatus assembly steps.

Figure 15 is a front perspective view of U-Bar A, U-Bar B, U-Lock Block and Stake B in its assembled, attached to laptop position. This configuration appears when user completes STEP 4 of the apparatus assembly steps.

Figure 16 is a front perspective view of U-Bar A, U-Bar B, U-Lock Block, Stake B and Weave Bar in its assembled, attached to laptop position. This configuration appears when user completes STEP 5 of the apparatus assembly steps.

Figure 17 is a front perspective view of U-Bar A, U-Bar B, U-Lock Block, Stake B, Weave Bar and Stake A in its assembled, attached to laptop position. This configuration appears when user completes STEP 6 of the apparatus assembly steps.

Figure 18 is a front perspective view of U-Bar A, U-Bar B, U-Lock Block, Stake B, Weave Bar, Stake A and attached open padlock in its assembled, attached to laptop position. This configuration appears when user completes STEP 7 of the apparatus assembly steps.

Figure 19 is a front perspective view of the preferred embodiment of the security system including the attached padlock plus all pieces of the device (U-Bar A, U-Bar B, U-Lock Block, Stake B, Weave Bar, Stake A, open padlock and chain) in its assembled, attached to laptop and attached to nearby immovable object position, non-secured.

Figure 20 is a front perspective view of the preferred embodiment of the security system including the attached padlock plus all pieces in the device (U-Bar A, U-Bar B, U-Lock Block, Stake B, Weave Bar, Stake A, and chain) in its assembled, attached to laptop, and attached to nearby immovable object position, padlock closed. This configuration appears when user completes STEP 8 of the apparatus assembly steps. The security apparatus is now secured and protecting said device.

Figure 21 is a front perspective view of the carrying case with its disassembled members nested compactly within it and ready for transport.

Numeral references are employed to designate like parts throughout the various figures of the drawings. See Appendix C: "SUMMARY LIST OF FIGURES" for a charted summary of all figures, and see Appendix D: "SUMMARY LIST OF NUMBERS" for a list, with notes, of the respective numbered elements for all figures of the drawings.

DETAILED DESCRIPTION OF PREFERRED EMBODIMENT

Referring more specifically to the drawings, an embodiment of the invention will be now described in detail by way of example of its assembly on a laptop computer.

Figure 1 is a front perspective view of piece Number 1, labelled "U-Bar A(1)." Referring to Figure 1, the "U-Bar A" piece (1) according to the present invention has a shape like a "U" with two long sections, equal in length, and a connecting short section in between. This "U" shape fits over the width of the laptop (9), left to right of the user, and extends out slightly past the side of the laptop (9), to the right of the user. It is one solid piece. The short section is of a length just larger than the depth of the item being protected, to span it and allow sufficient room to accommodate for the bend. The longer sections of the piece are of the equal length to each other and have a series of rectangular holes at the end protruding out (11) on the lower portion relative to the laptop, and a matching series of rectangular holes at the end protruding out (12) on the upper portion relative to the laptop . The size of these slots (11,12) is just large enough to allow the Stake A (3) or Stake B (4) - which are of the same dimensions, to slide through it securely. This piece of the apparatus is used first in assembly. It is slid through the U-Lock Block, (6) entering it (19) and exiting it (20) in Assembly Step 1 and then the two connected items are placed over the width of the laptop (9) in Assembly Step 2.

Figure 2 is a front perspective view of piece Number 2, labelled "U-Bar B (2)." Referring to Figure 2, the "U-Bar B" piece (2) according to the present invention has a shape like a "U" with two long sections, equal in length and a connecting short section in between. This "U" shape fits over the length of the laptop (9), back to front of the user, and extends out slightly past the front of the laptop (9), toward the user. It is one solid piece. The short section is of a length just larger than the depth of the item being protected, to span it and allow sufficient room to accommodate for the bend. The longer sections of the piece are of equal length to each other and have a series of rectangular holes at the end protruding out (13) on the lower portion relative to the laptop, and a matching series of rectangular holes at the end protruding out (14) on the upper portion relative to the laptop . The size of these slots (13,14) is just large enough to allow the Stake B (4) or Stake A (3) - which are of the same dimensions, to slide through securely.

On items that are square, U-Bar A (1) and U-Bar B (2) are the same length. On rectangular items their length is adjusted accordingly, as it is in the present example.

Figure 3 is a blown up front perspective view of piece Number 3, labelled "Stake A (3)." Referring to Figure 3, the "Stake A" piece (3) according to the present invention has a thick, round edged stopper bottom (15) at one end, so that when the Stake A (3) is vertically inserted through the rectangular slots (13,14) in U-Bar B (2) the stopper bottom (15) secures it and prevents it from going through completely. The Stake A (3) also is of a thickness just smaller than the Tubular Opening (17) at the end of the Weave Bar (5), so that when it is vertically inserted through the rectangular slots (13,14) in U-Bar B (2) at Assembly Step 6, and meets the horizontally assembled Weave Bar (5) which was assembled just prior in Assembly Step 5, it fits snugly into said Tubular Opening (17) such that the circle section of its Circle-Slit opening (16) is perfectly aligned with the Circular Openings (18a, 18b) at each side of the Tubular Opening (17) of the Weave Bar (5). This allows for the padlock shackle to be inserted through the aligned round areas of: Stake A Circle-Slit opening (16); and the Circular Openings (18a, 18b) of the Tubular Opening (17) of the Weave Bar (5) at Assembly Step 7. Note that Stake A (3) has the same circle-slit opening (16) as Stake B (4) despite not making use of the rectangular portion of the shape so that it is the same as Stake B (4), and thus they can be manufactured exactly the same.

Figure 4 is a blown up front perspective view of piece Number 4, labelled "Stake B (4)." Referring to Figure 4, the "Stake B" piece (4) according to the present invention has a thick, round edged stopper bottom (15) at one end, so that when the Stake B (4) is vertically inserted through the rectangular slots (11,12) in U-Bar A (1) at Assembly Step 4, the stopper bottom (15) secures it and prevents it from going through completely. With respect to thickness, Stake B (4) is the same as the above discussed Stake A (3). The Stake B (4) also has the same circle-slit opening (16) as Stake A (3) and in this case the circular portion of the shape is not employed, however the rectangular portion of the shape, which is thicker than the thickness of Stake B, is used by the Weave Bar (5) when the latter is inserted into the Stake B (4) circle-slit opening (16) at Assembly Step 5.

Figure 5 is a blown up front perspective view of piece Number 5, labelled

"Weave Bar (5)" situated horizontally. Referring to Figure 5, the "Weave Bar" (5) piece according to the present invention, has a thick, round edged stopper bottom (15) at one end, so that when the Weave Bar (5) is horizontally inserted through the Circle-Slit opening (16) at the top of Stake B (4) at Assembly Step 5, the stopper bottom (15) secures it and prevents it from going through completely. The Weave Bar (5) is made of extremely strong material and has a size and an angled shape such that, once it is completely inserted, its Tubular Opening (17) is aligned and able to take the shape and size of Stake A (3) which is to be inserted next at Assembly Step 6, and also so that its Circular Openings (18a, 18b) at each of its sides perfectly aligns with the circle shape of the Circle-Slit opening (16) of the Stake A (3), thus enabling the padlock shackle entry at Assembly Step 7.

Figure 6 is a blown up front perspective view of piece Number 6, labelled "U-Lock Block (6)" situated horizontally. Referring to Figure 6, the "U-Lock Block" piece (6) according to the present invention, is made of extremely strong material and has a rectangular shape, a protective, attractive back cover (23) and has two side slots (19,20) so that U-Bar A (1) can enter the side slot (19) and exit the other side slot (20) when it slides through the U-Lock Block (6) at Assembly Step 1. The U-Lock Block (6) also has a tubular opening (21,22) so that U-Bar B (2) can enter it (21) and exit the other side of it (22) when it slides through the U-Lock Block (6) and U-Bar A (1) - which are now combined and placed on the laptop (9) from Assembly Step 2, at Assembly Step 3.

Figure 7 is a front perspective view of piece Number 7, labelled "Chain (7)." Referring to Figure 7, the "Chain" (7) according to the present invention, is a standard thick, sturdy link chain of a width sufficient to require a machine to cut, and of a length long enough to wrap around a nearby immovable object and have Chain Link End A (27) and Chain Link End B (28) enter the padlock at Assembly Step 8. Said chain is also encased in a sturdy, attractive leather material to prevent scratches and damage and for aesthetic purposes.

Figure 8 is a front perspective view of the empty carrying case (8) to transport the unassembled items. Referring to Figure 8, the "Carrying Case" (8) is an attractive leather case with a horizontal top handle (25) and a vertical top handle (26) which holds and transports the nested, compact disassembled items.

Figure 9 is a front perspective view of a laptop (9) – an example of an item which can be protected by this invention (not supplied with this invention). Referring to Figure 9, the laptop (9) according to the present invention is one example of a relatively expensive item able to be protected by said computer and electronics security system.

Figure 10 is a perspective view of a standard padlock (10) – (not supplied with this invention). Referring to Figure 10, the standard padlock (10), according to the present invention, is a standard market padlock for use with the invention and not provided with said invention. It is placed on the assembled apparatus at Assembly Step 7 and secured with the chain (7) attached at Assembly Step 8.

Figure 11 is an exploded front perspective view of the assembled apparatus over a laptop computer (9). Referring to Figure 11, each piece (1,2,3,4,5,6,7) of the device and the padlock (10) is exploded in its correct place at its correct angle and facing in its proper direction. The Eight Easy Steps to Assemble the Cross-U Anti Theft Device, which are listed in Appendix B, will now be discussed in detail and in order in the following Figures: 12; 13; 14; 15; 16; 17; 18, and 19 and the final, assembled, secured apparatus is discussed and appears as Figure 20.

Figure 12 is a front perspective view of U-Bar A (1) and U-Lock Block (6) in its assembled, unattached position. This configuration appears when user completes STEP 1 of the apparatus assembly steps. Referring to Figure 12, there is shown an example embodiment of the partially assembled security device according to the invention, showing the pieces labelled: "U-Bar A" (1); and "U-Lock Block" (6), and making salient the Assembly Step #1: "Slide U-Bar A through the U-Lock Block."

Figure 13 is a front perspective view of U-Bar A (1) and U-Lock Block (6) in its assembled, attached to laptop (9) position. This configuration appears when user completes STEP 2 of the apparatus assembly steps. Referring to Figure 13, there is shown an example embodiment of the partially assembled security device according to the invention, showing the pieces labelled: "U-Bar A" (1); and "U-Lock Block" (6); and showing the laptop (9) to be protected, and making salient the Assembly Step #2: "Place the connected U-Bar A and U-Lock Block over the item to be protected so that the U-Lock Block is on the right side of the user, the left side of the laptop."

Figure 14 is a front perspective view of U-Bar A (1), U-Bar B (2) and U-Lock Block (6) in its assembled, attached to laptop position. This configuration appears when user completes STEP 3 of the apparatus assembly steps. Referring to Figure 14, there is shown an example embodiment of the partially assembled security device according to the invention, showing the pieces labelled: "U-Bar A" (1); "U-Lock Block" (6); "U-Bar B" (2); and showing the laptop (9) to be protected, and making salient the Assembly Step #3: "Slide U-Bar B from the back of the laptop to the front toward the user, and through the opening of the U-Lock Block now positioned on the laptop."

Figure 15 is a front perspective view of U-Bar A (1), U-Bar B (2), U-Lock Block (6) and Stake B (4) in its assembled, attached to laptop (9) position. This configuration appears when user completes STEP 4 of the apparatus assembly steps. Referring to Figure 15, there is shown an example embodiment of the partially assembled security device according to the invention, showing the pieces labelled: "U-Bar A" (1); "U-Lock Block" (6); "U-Bar B" (2); Stake B (4); and showing the laptop (9) to be protected, and making salient the Assembly Step #4: "Insert Stake B vertically through the lower and then upper slots of U-Bar A."

Figure 16 is a front perspective view of U-Bar A (1), U-Bar B (2), U-Lock Block (6), Stake B (4) and Weave Bar (5) in its assembled, attached to laptop (9) position. This configuration appears when user completes STEP 5 of the apparatus assembly steps. Referring to Figure 16, there is shown an example embodiment of the partially assembled security device according to the invention, showing the pieces labelled: "U-Bar A" (1); "U-Lock Block" (6); "U-Bar B" (2); Stake B (4); "Weave Bar" (5); and showing the laptop (9) to be protected, and making salient the Assembly Step #5: "Fully insert Weave Bar horizontally through opening at top of Stake B."

Figure 17 is a front perspective view of U-Bar A (1), U-Bar B (2), U-Lock Block (6), Stake B (4), Weave Bar (5) and Stake A (3) in its assembled, attached to laptop position. This configuration appears when user completes STEP 6 of the apparatus assembly steps. Referring to Figure 17, there is shown an example embodiment of the partially assembled security device according to the invention, showing the pieces labelled: "U-Bar A" (1); "U-Lock Block" (6); "U-Bar B" (2); Stake B (4); "Weave Bar" (5); Stake A (3); and showing the laptop (9) to be protected, and making salient the

Assembly Step #6: "Insert Stake A vertically through the lower and then upper slots of U-Bar B and then through the tubular horizontal opening of the Weave Bar so that the opening on Stake A is perfectly aligned with the opening on the tube of the Weave Bar."

Figure 18 is a front perspective view of U-Bar A (1), U-Bar B (2), U-Lock Block (6), Stake B (4), Weave Bar (5), Stake A (3) and attached open padlock (10) in its assembled, attached to laptop (9) position. This configuration appears when user completes STEP 7 of the apparatus assembly steps. Referring to Figure 18, there is shown an example embodiment of the partially assembled security device according to the invention, showing the pieces labelled: "U-Bar A" (1); "U-Lock Block" (6); "U-Bar B" (2); Stake B (4); "Weave Bar" (5); Stake A (3); and showing the padlock (10), and the laptop (9) to be protected, and making salient the Assembly Step #7: "Insert padlock through the aligned openings on Stake A and the Weave Bar."

Figure 19 is a front perspective view of the preferred embodiment of the security system including the attached padlock plus all pieces of the device (U-Bar A [1], U-Bar B [2], U-Lock Block [6], Stake B [4], Weave Bar [5], Stake A [3], open padlock [10] and chain [7]) in its assembled, attached to laptop (9) and attached to nearby immovable object position, non-secured. Referring to Figure 19, there is shown an example embodiment of the partially assembled security device according to the invention, showing the pieces labelled: : "U-Bar A" (1); "U-Lock Block" (6); "U-Bar B" (2); Stake B (4); "Weave Bar" (5); Stake A (3); "Chain" (7); and showing the padlock (10), and the laptop (9) to be protected, and making salient the Assembly Step #8: "Wrap chain around a nearby immovable object, inserting each end of chain through the padlock and close padlock. The anti-theft device is now secured."

Figure 20 is a front perspective view of the preferred embodiment of the security system including the attached padlock (10) plus all pieces in the device (U-Bar A [1], U-Bar B [2], U-Lock Block [6], Stake B [4], Weave Bar [5], Stake A [3], and chain [7]) in its assembled, attached to laptop (9), and attached to nearby immovable object position, padlock closed. This configuration appears when user completes STEP 8 of the apparatus assembly steps. The security apparatus is now secured and protecting said device. Referring to Figure 20, there is shown an example embodiment of the fully assembled and secured security device protecting a laptop computer according to the invention. In

its properly assembled and secured state, it provides complete protection from theft. In its essence: the laptop computer can't be taken because it is attached to a nearby immovable object with the chain; the chain can't be removed because of the secured padlock; the padlock can't be removed because it is locked and strong; the U-Lock Block can't be removed because it is held in place by the locked on U-Bars; the U-Bars can't be slid off because each is held in place by the other and by the U-Lock Block, and by Stake A and Stake B, which are in turn held in place by their respective stopper ends and by the Weave Bar; and finally the Weave Bar is, in turn, held in place by the padlock and unique configuration held at one end by its tubular opening into which Stake A was inserted into, and at the other end by its stopper bottom.

Figure 21 is a front perspective view of the carrying case (8) with its disassembled members nested compactly within it and ready for transport. Referring to Figure 21, there is shown the "Carrying Case" (8) nesting all disassembled parts (1,2,3,4,5,6,7) and the padlock (10 compactly.

The invention being thus described can be varied in a number of ways, for example, said invention can have two "Lock Blocks", one below and one above said item being protected, and "U-Lock Blocks" in alternative positions, for additional security, to accommodate larger sizes and for other reasons. Other variations of said invention can contain multiple U-Bars, U-Lock Blocks, Stakes and Weave Bars of various adjusted sizes and related aspects, to enable unique shaped or sized objects to be protected including polygonal, curved, spherical, cylindrical, round items and the like. The invention being thus described in one embodiment in detail herein, it will be apparent to those skilled in the art that the same may be varied in many ways without departing from the spirit and scope of the invention. Any and all such modifications are intended to be included within the scope of the following claims.

APPENDICES

APPENDIX A: SECURITY DEVICE PIECES LIST

MEMBER #	NAME
1	U-BAR A
2	U-BAR B
3	STAKE A
4	STAKE B
5	WEAVE BAR
6	U-LOCK BLOCK
7	CHAIN
8	CARRY CASE

APPENDIX B:

EIGHT EASY STEPS TO ASSEMBLE THE CROSS-U ANTI-THEFT DEVICE

1. Slide U-Bar A through the U-Lock Block.
2. Place the connected U-Bar A and U-Lock Block over the item to be protected so that the U-Lock Block is on the right side of the user, the left side of the laptop .
3. Slide U-Bar B from the back of the laptop to the front toward the user, and through the opening of the U-Lock Block now positioned on the laptop.
4. Insert Stake B vertically through the lower and then upper slots of U-Bar A.
5. Fully insert Weave Bar horizontally through opening at top of Stake B.
6. Insert Stake A vertically through the lower and then upper slots of U-Bar B and then through the tubular horizontal opening of the Weave Bar so that the opening on Stake A is perfectly aligned with the opening on the tube of the Weave Bar.
7. Insert padlock through the aligned openings on Stake A and the Weave Bar.
8. Wrap chain around a nearby immovable object, inserting each end of chain through the padlock and close padlock. The anti-theft device is now secured.

APPENDIX C: "SUMMARY LIST OF FIGURES"

1	U-BAR A
2	U-BAR B
3	STAKE A
4	STAKE B
5	WEAVE BAR
6	U-LOCK BLOCK
7	CHAIN
8	CARRYING CASE – EMPTY
9	LAPTOP
10	STANDARD PADLOCK
11	ALL MEMBERS ASSEMBLED, EXPLODED VIEW OVER LAPTOP
12	U-BAR A ATTACHED TO U-LOCK BLOCK
13	COMBINED U-BAR A AND U-LOCK BLOCK OVER LAPTOP
14	U-BAR B ATTACHED TO COMBINED U-BAR A AND U-LOCK BLOCK OVER LAPTOP
15	STAKE B ATTACHED TO COMBINED U-BAR A, U-BAR B, & U-LOCK BLOCK OVER LAPTOP
16	WEAVE BAR ATTACHED TO COMBINED STAKE B, U-BAR A, U-BAR B, AND U-LOCK BLOCK OVER LAPTOP
17	STAKE A ATTACHED TO COMBINED WEAVE BAR, STAKE B, U-BAR B, U-BAR A AND U-LOCK BLOCK OVER LAPTOP
18	OPEN PADLOCK ATTACHED TO COMBINED STAKE A, WEAVE BAR, STAKE B, U-BAR B, U-BAR A, AND U-LOCK BLOCK OVER LAPTOP
19	OPEN PADLOCK ATTACHED TO CHAIN ENDS, & COMBINED STAKE A, WEAVE BAR,STAKE B,U-BAR B,U-BAR A,&U-LOCK BLOCK OVER LAPTOP
20	CLOSED PADLOCK ATTACHED TO BOTH CHAIN ENDS (WHICH IS SECURED TO AREA), AND COMBINED STAKE A, WEAVE BAR, STAKE B, U-BAR B, U-BAR A, & U-LOCK BLOCK OVER LAPTOP . DEVICE SECURED.
21	CARRY CASE – FILLED WITH PIECES OF APPARATUS

APPENDIX D: "SUMMARY LIST OF NUMBERS"

NUMBER	NAME OF ITEM	COMMENTS
1	U-BAR A	Contains numbers: 11,12
2	U-BAR B	Contains numbers: 13,14
3	STAKE A	Contains numbers:15,16
4	STAKE B	Contains numbers:15, 16
5	WEAVE BAR	Contains numbers:15, 17, 18a, 18b,
6	U-LOCK BLOCK	Contains numbers: 19, 20, 21, 22, 23
7	CHAIN	Contains numbers: 24,27,28
8	CARRY CASE	Contains numbers: 25,26
9	LAPTOP	Used for example.
10	STANDARD PADLOCK	Not included with device.
11	BOTTOM SLOTS ON U-BAR A	PART OF number: 1
12	TOP SLOTS ON U-BAR A	PART OF number: 1
13	BOTTOM SLOTS ON U-BAR B	PART OF number: 2
14	TOP SLOTS ON U-BAR B	PART OF number: 2
15	ROUND EDGED STOPPER BOTTOM	ON: 3, 4, 5
16	CIRCLE SLIT OPENING	ON: 3, 4
17	WEAVE BAR TUBED END	ON: 5
18a	CIRCULAR OPENING A ON TUBE	ON: 5
18b	CIRCULAR OPENING B ON TUBE	ON: 5
19	SIDE SLOT 1 ON U-LOCK BLOCK	ON: 6
20	SIDE SLOT 2 ON U-LOCK BLOCK	ON: 6
21	OPEN TUBE AREA 1 ON U-LOCK BLOCK	ON: 6
22	OPEN TUBE AREA 2 ON U-LOCK BLOCK	ON: 6

23	PROTECTIVE BACK COVER	ON: 6
24	PROTECTIVE CHAIN CASING	ON: 7
25	CARRY CASE HANDLE 1	ON: 8
26	CARRY CASE HANDLE 2	ON: 8
27	CHAIN END OPEN LINK A	ON: 7
28	CHAIN END OPEN LINK B	ON: 7

NOTES ON ITEMS ABOVE:

i.) #15 is large enough and thick enough to prevent the member it is a part of from sliding through or being broken off.

ii.) #16 is an opening shaped like a combination of a rectangle and a circle. The circle is large enough to have a standard padlock shackle go through it. The rectangle is large enough to have the weave bar go through it. This shape is visually represented in figures 3 and 4.

iii.) #17 is a vertical tube opening with a circle opening at each side (#18a, #18b), the vertical tube opening of which is just greater in size than the width and thickness of Stake A and Stake B so stake A or B can go through it and be held strongly with locked padlock in place, and the circle openings of which are large enough to have a standard padlock shackle go through them. This tube opening with circular openings on each side is visually represented in figure 5.

iv.) #19 is a side slot on the U-Lock Block where U-Bar A slides in during assembly Step 1.

v.) #20 is a side slot on the U-Lock Block where U-Bar A slides out during assembly Step 1.

vi.) #21 is an opening in the tube of the U-Lock Block where U-Bar B slides in during assembly Step 3.

vii.) #22 is an opening in the tube of the U-Lock Block where U-Bar B slides out of during assembly Step 3.

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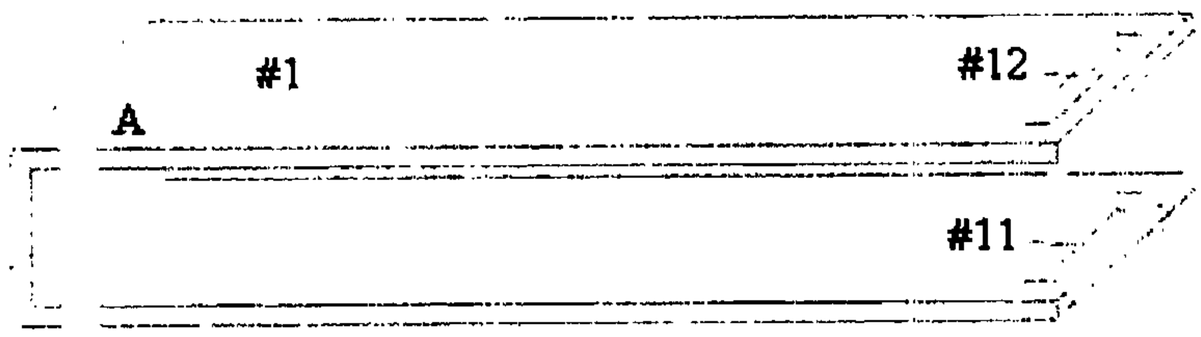
FIGURE 1



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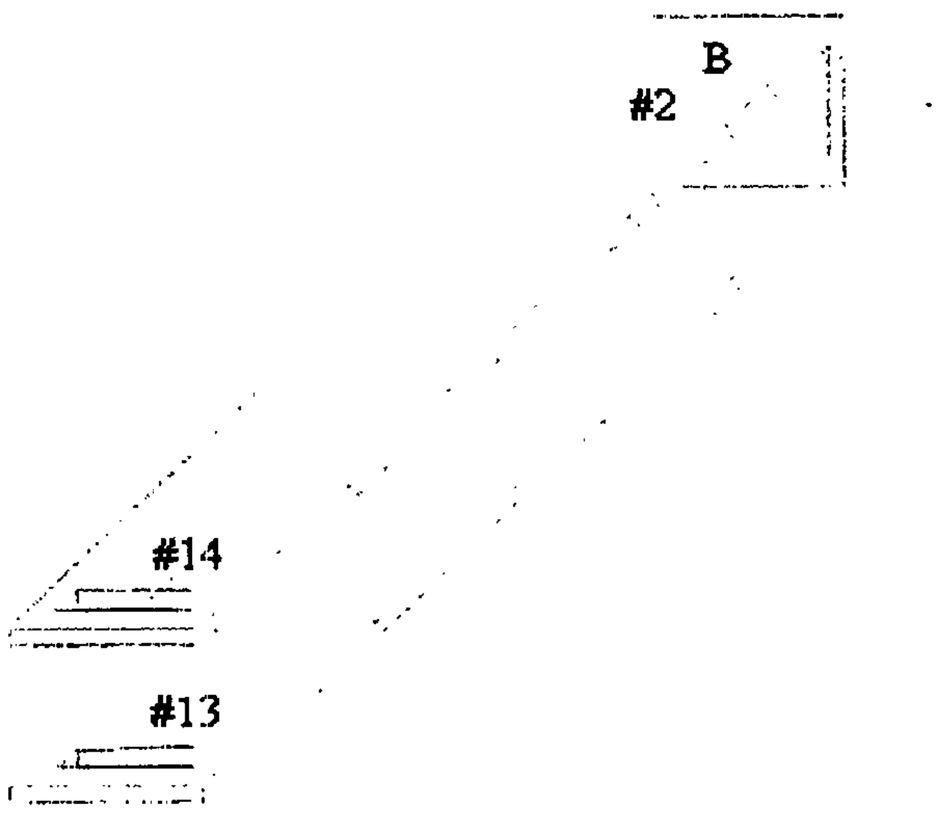

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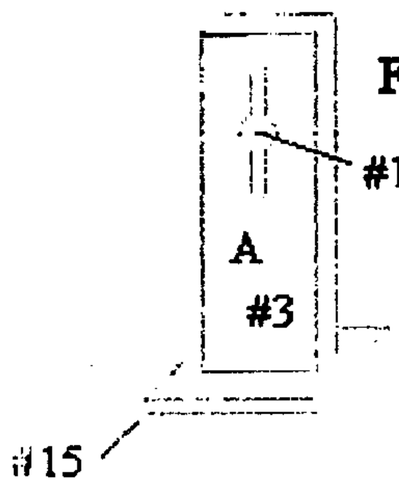

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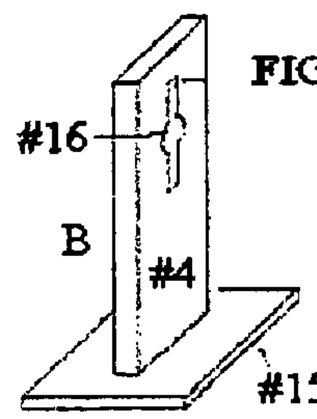

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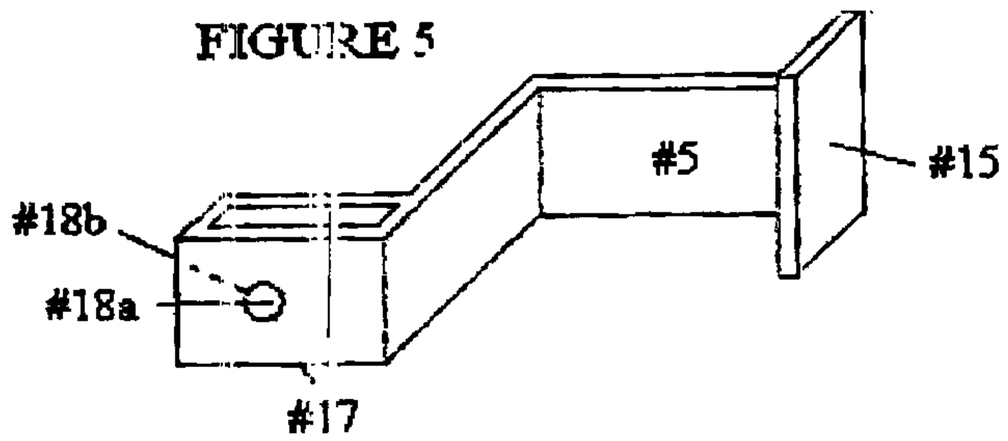

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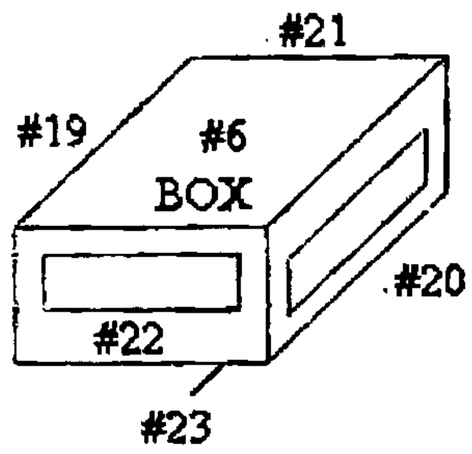

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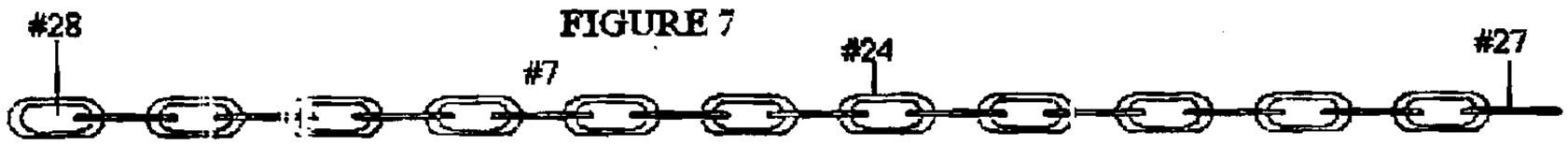

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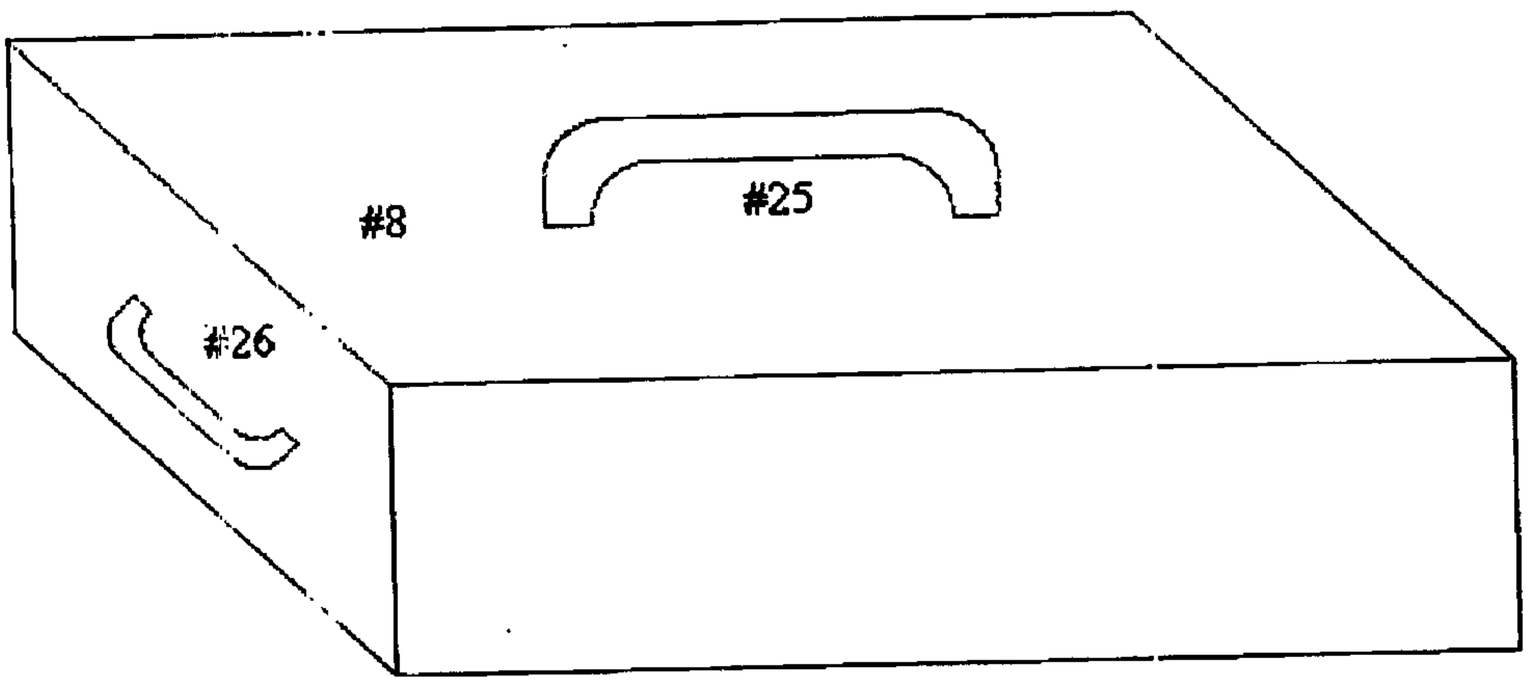

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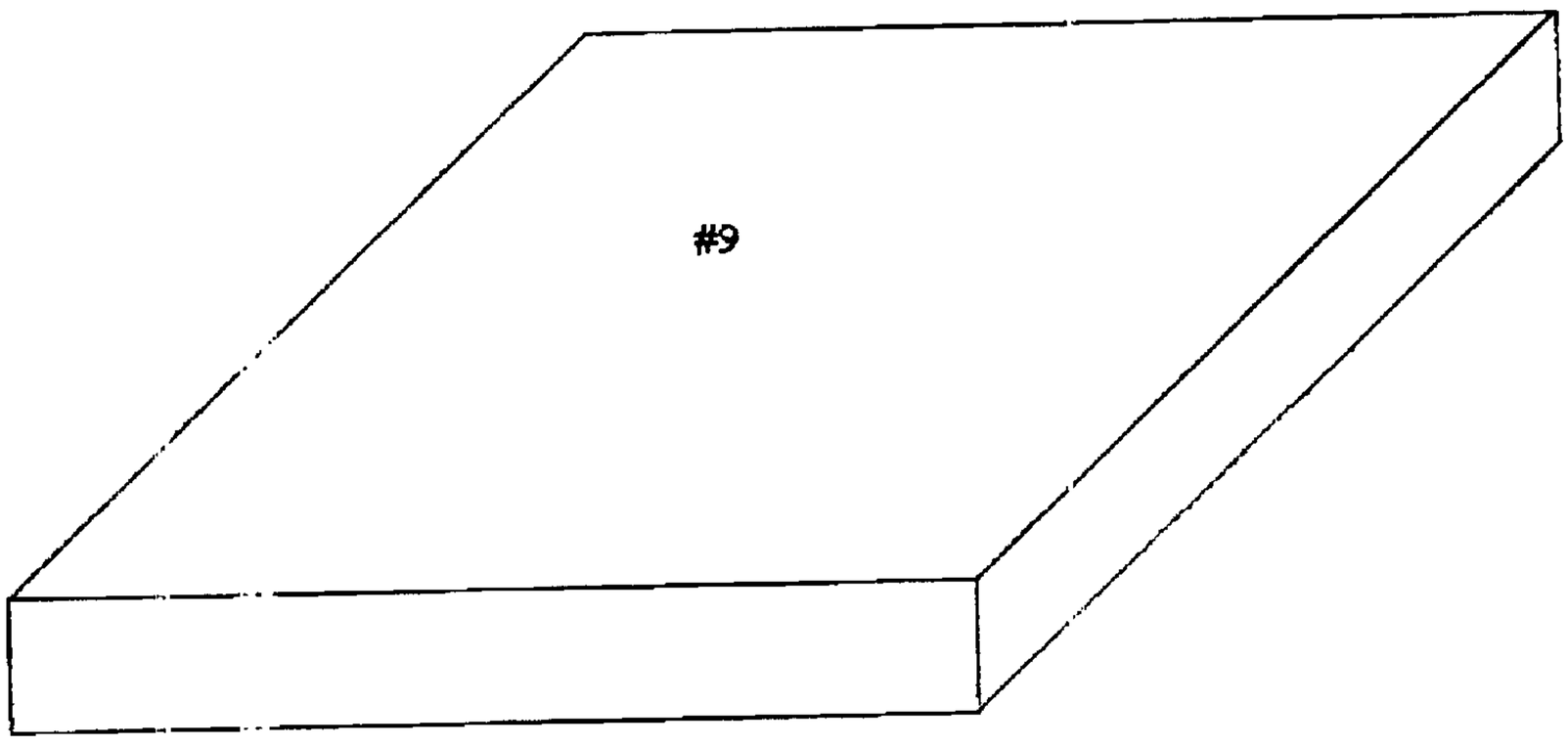

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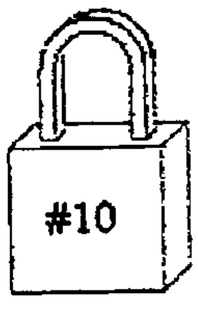

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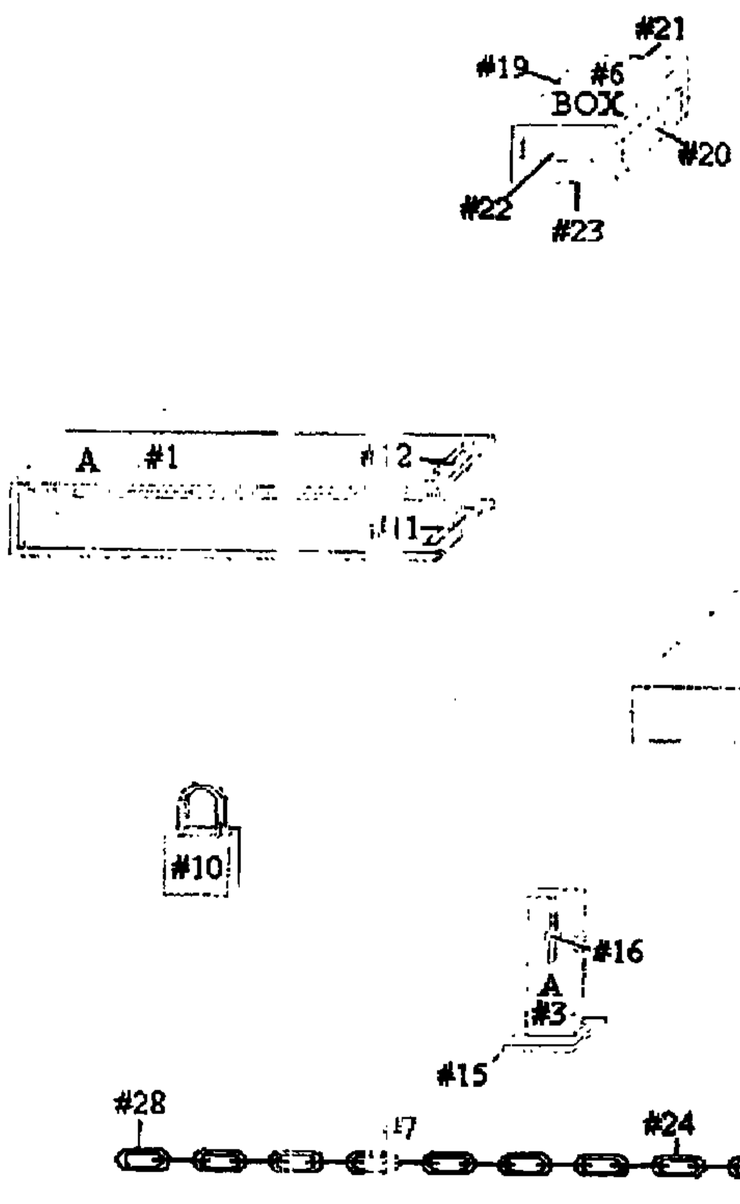
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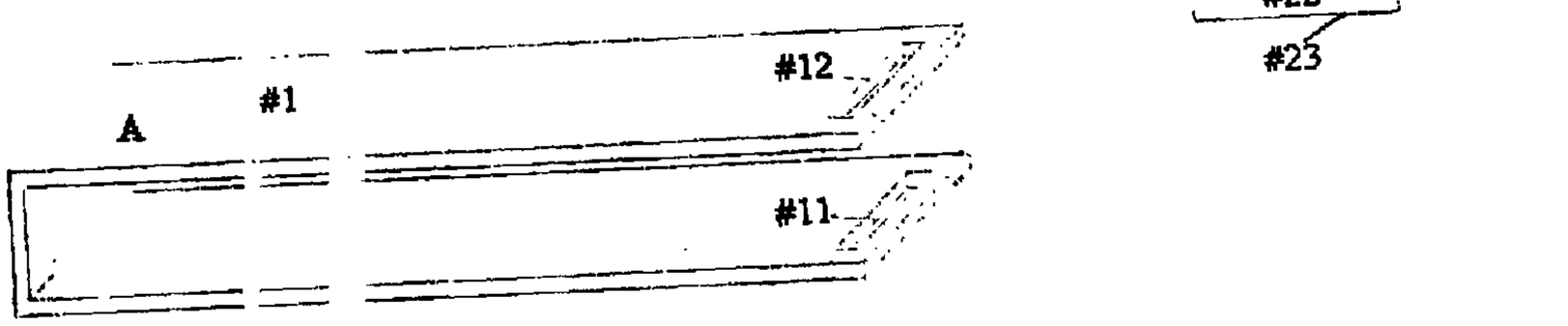
page 1

FIGURE 12



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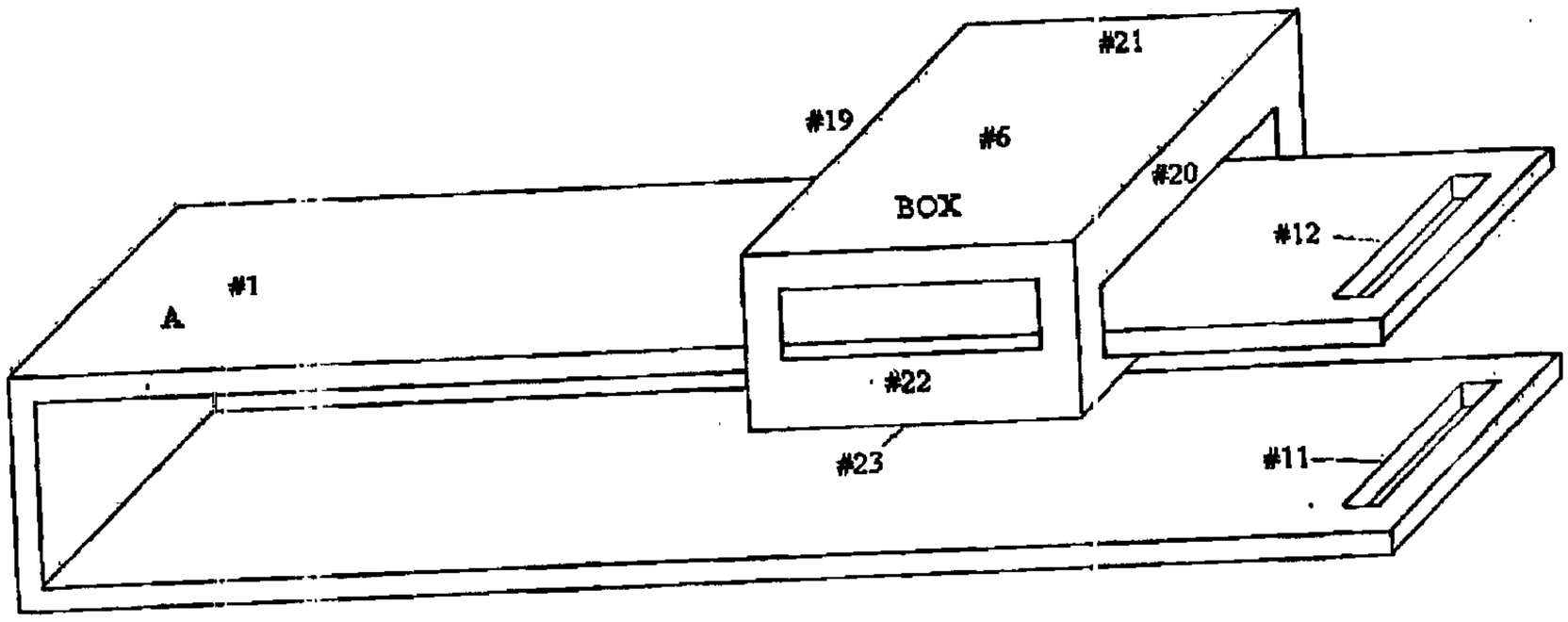

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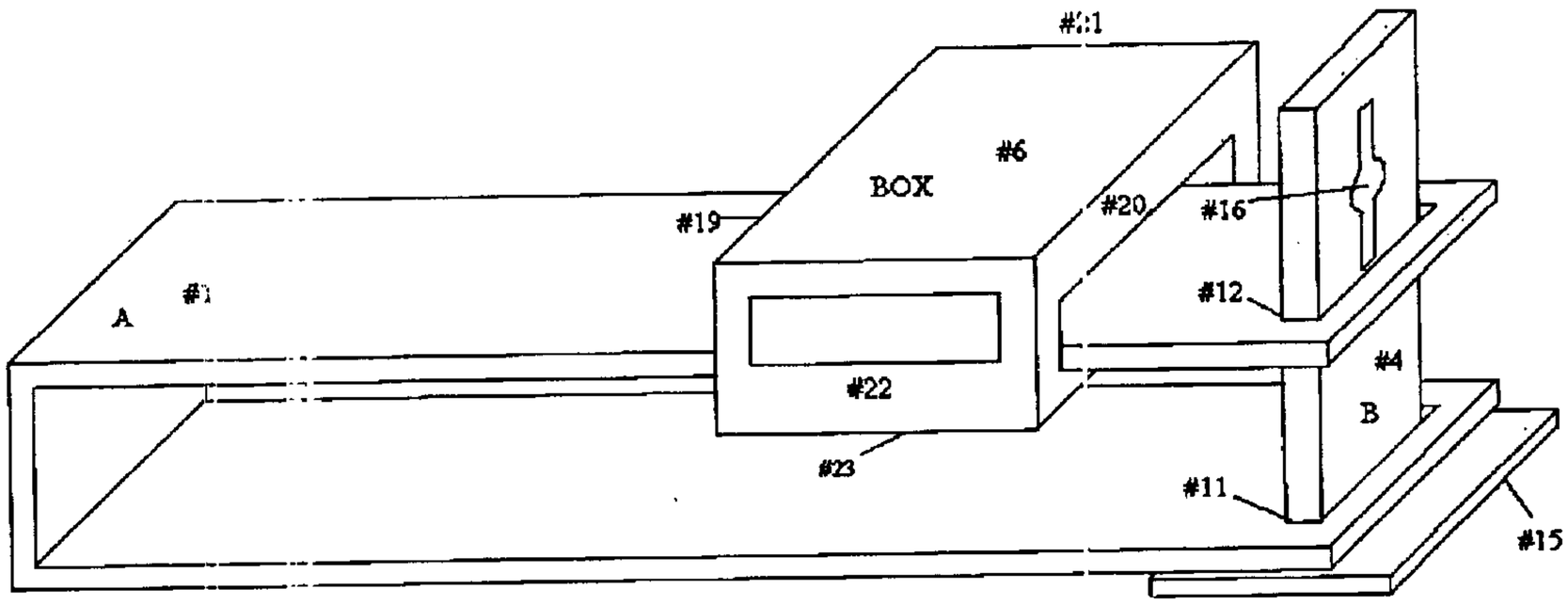

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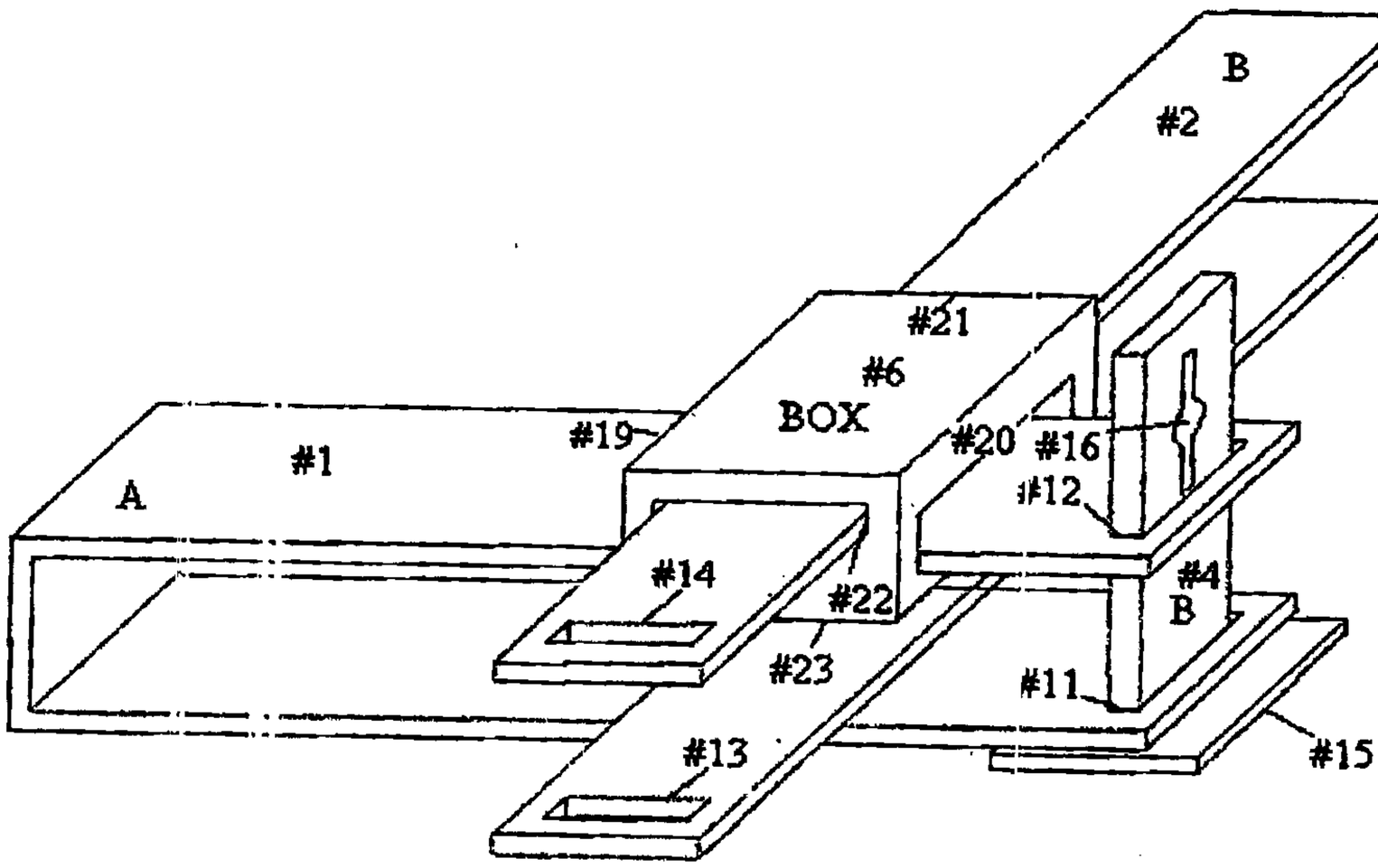

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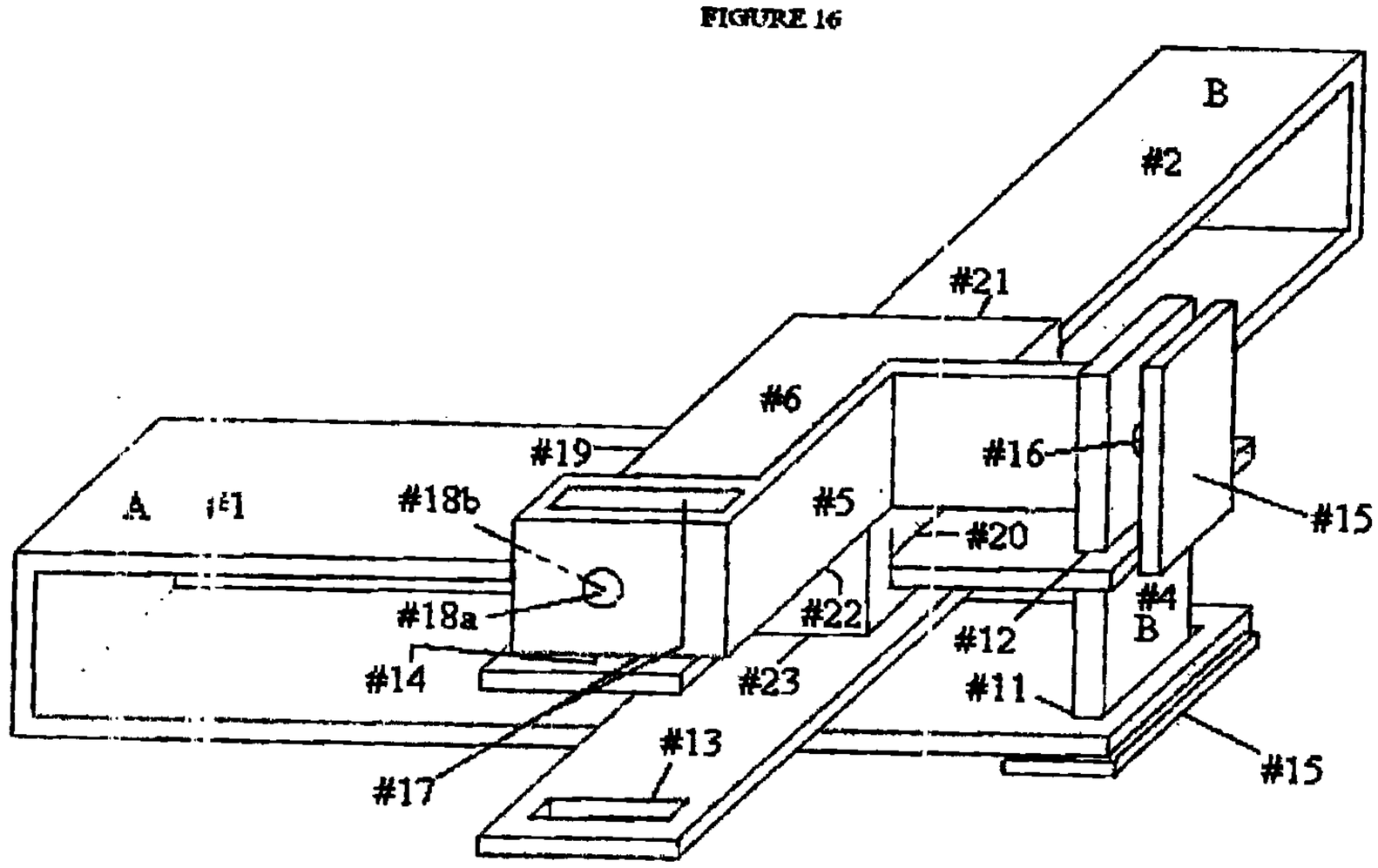

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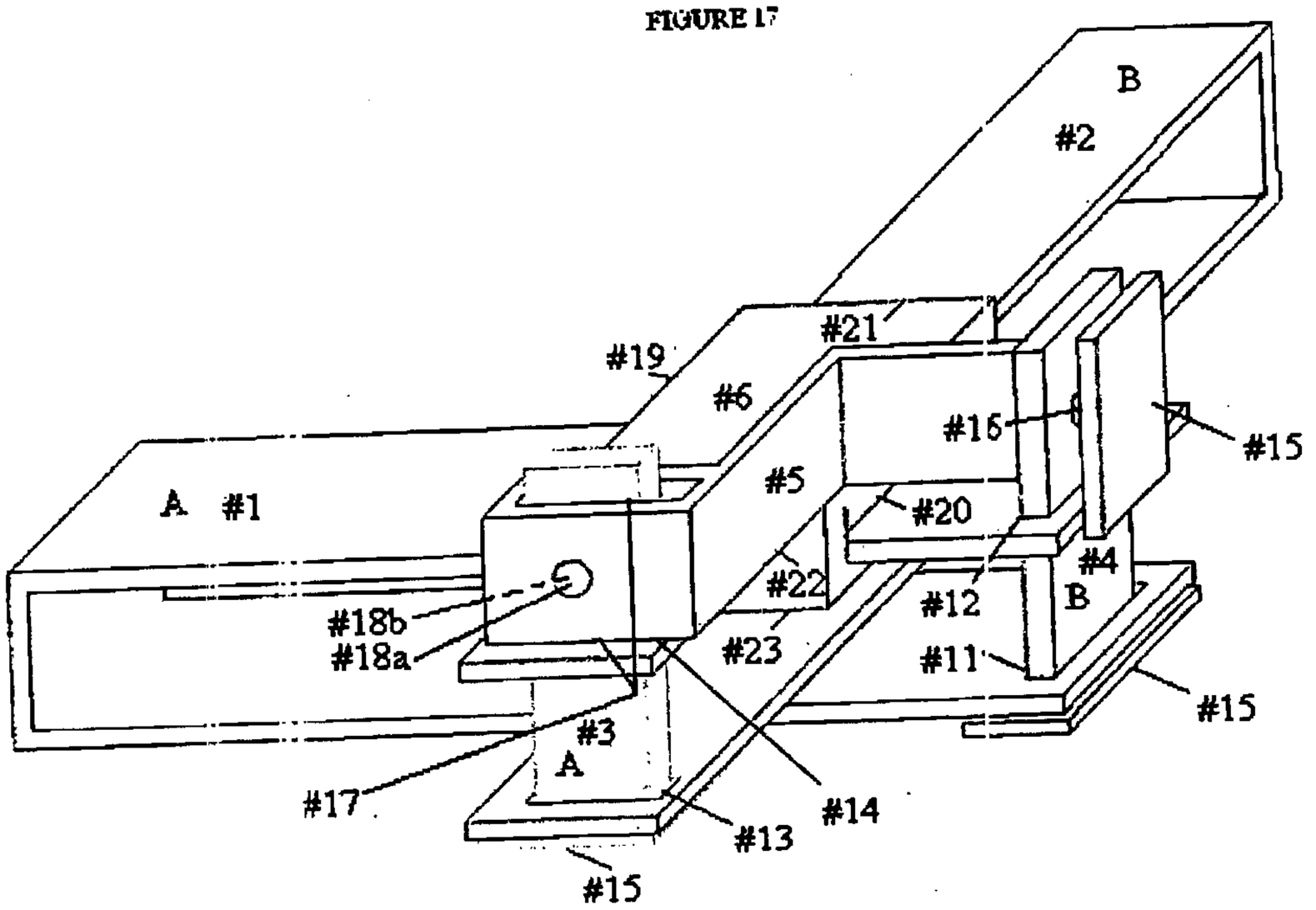

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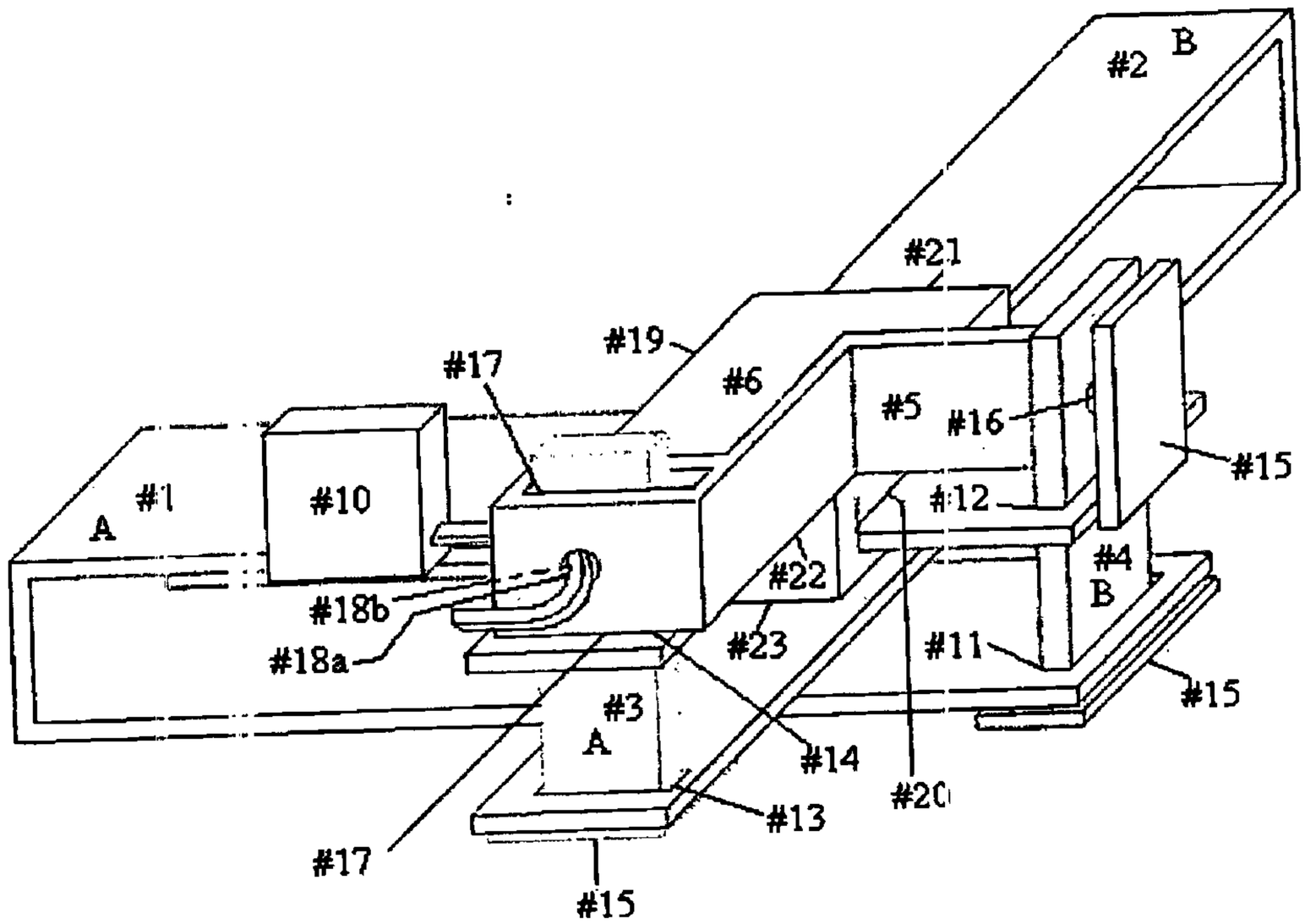

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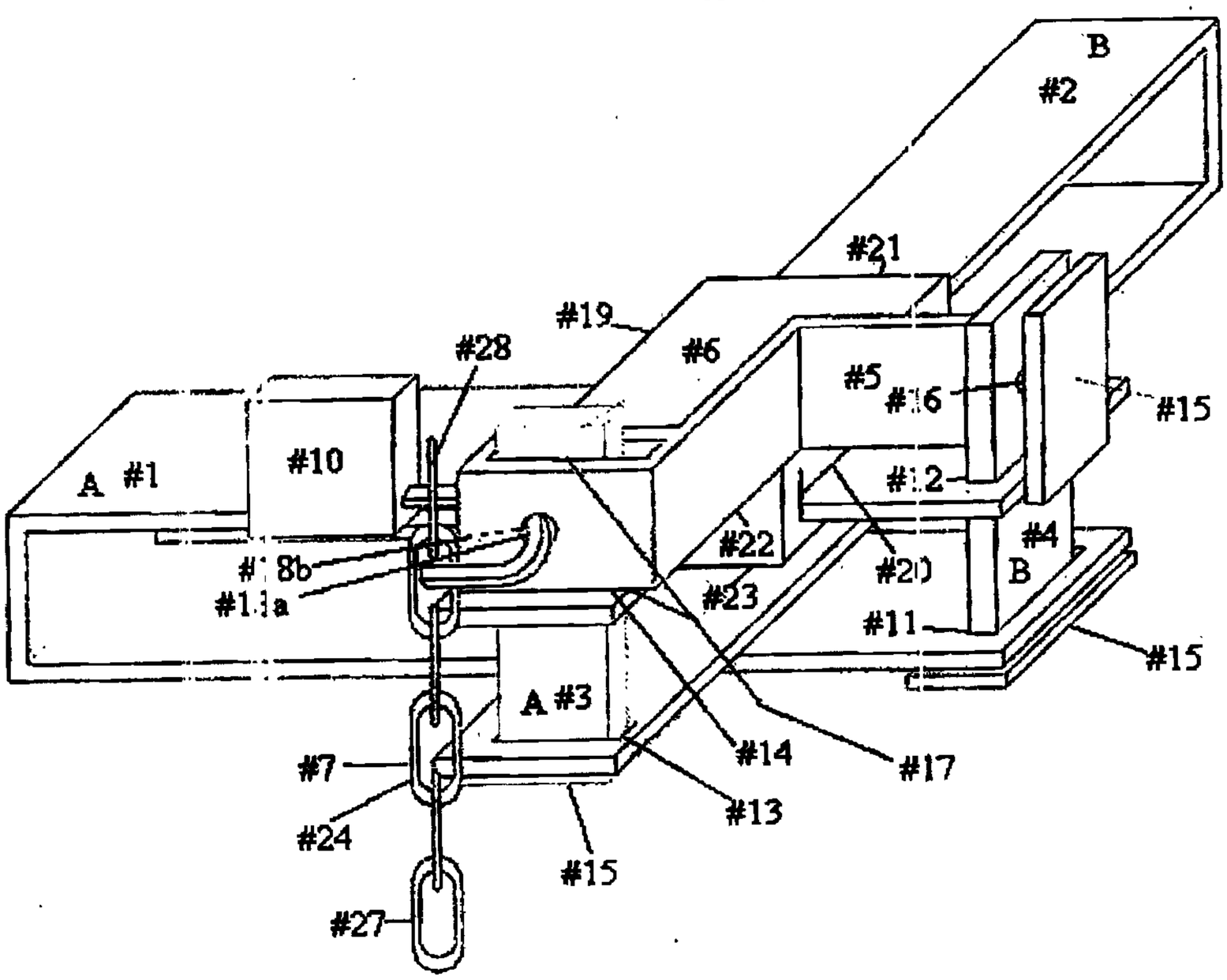
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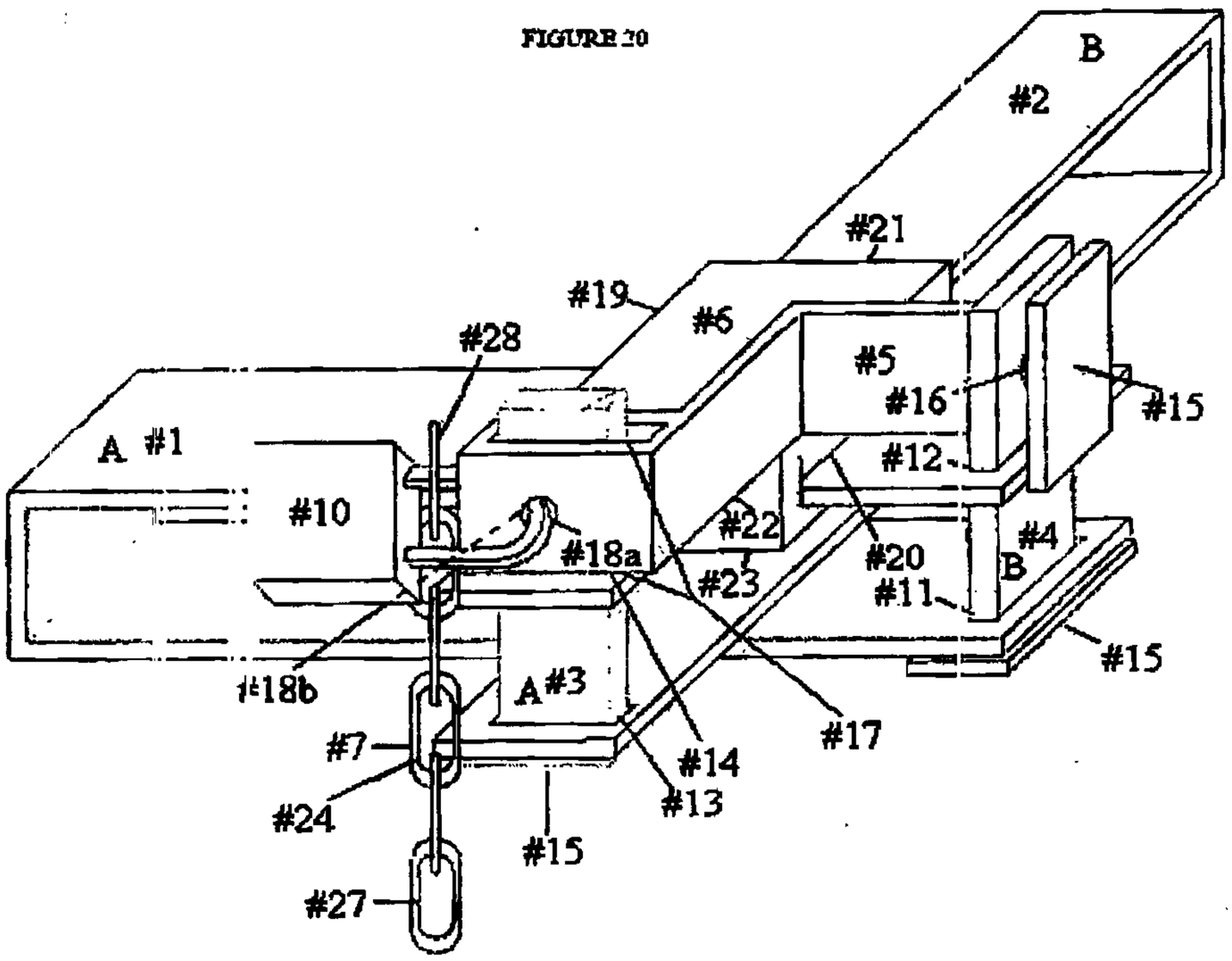
FIGURE 20



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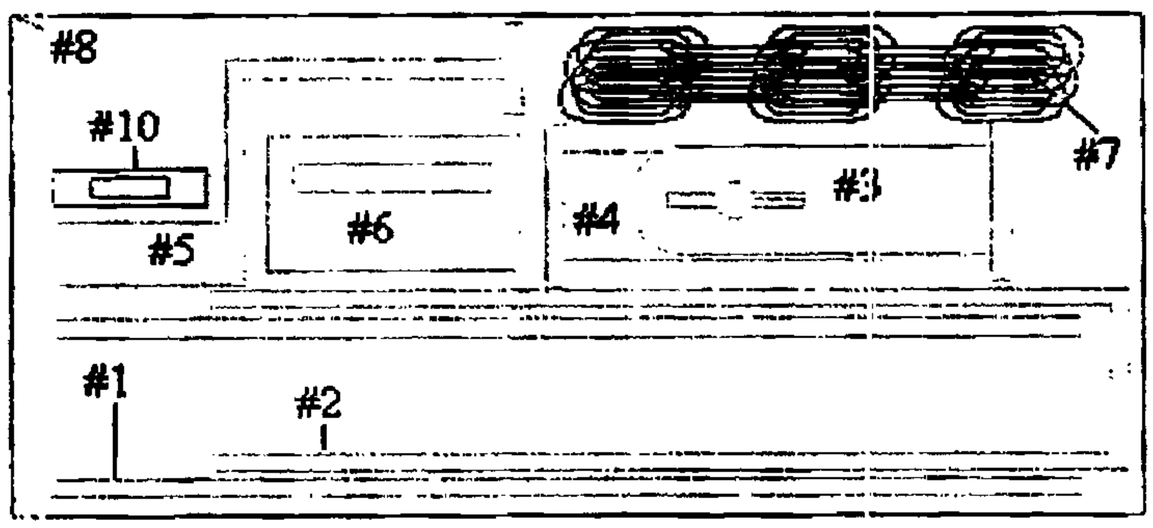

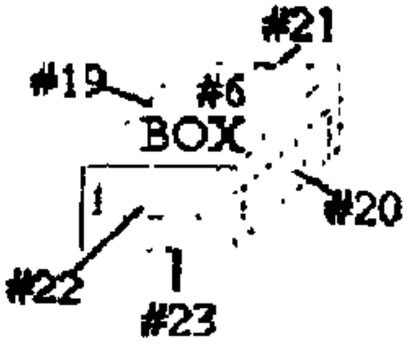
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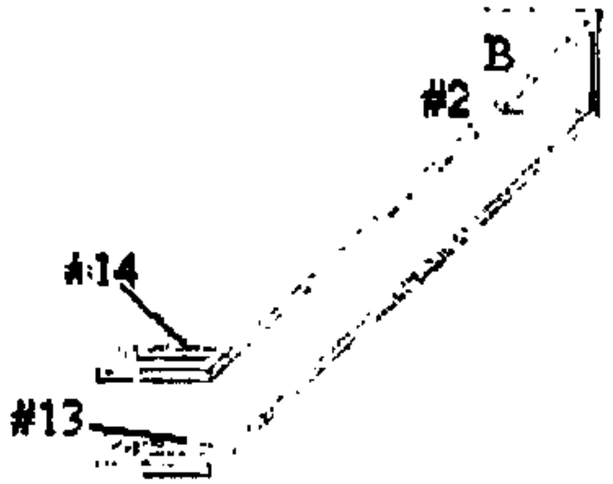
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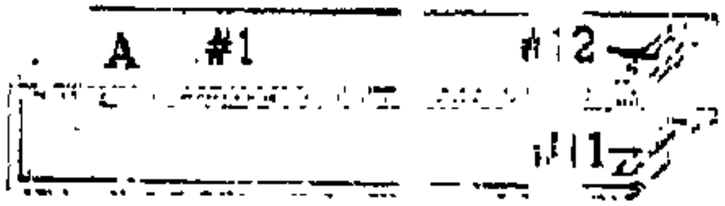
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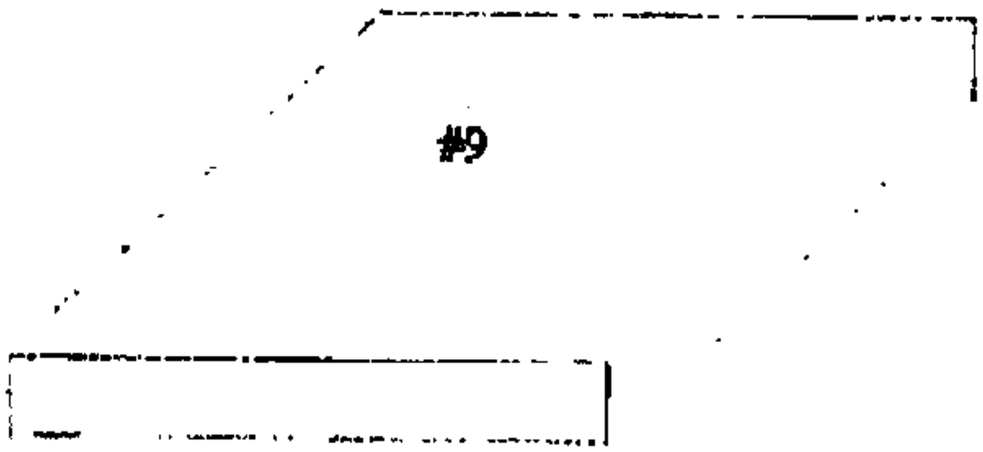
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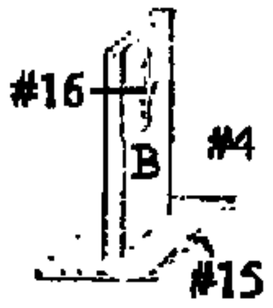
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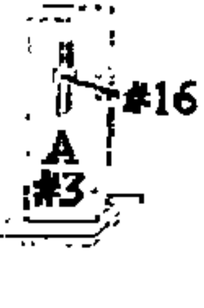
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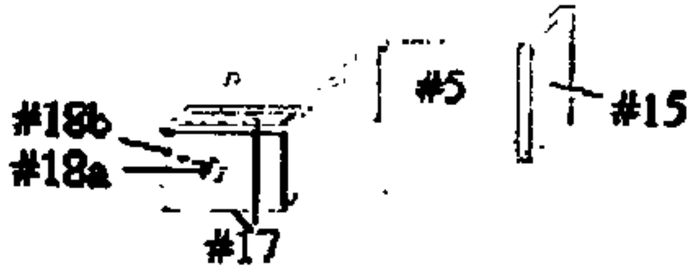
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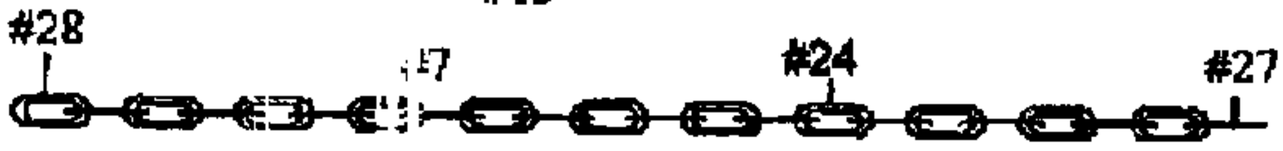
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