

Kenner's

MOTORIZED GIRDER & PANEL *and* BRIDGE & TURNPIKE BUILDING SET

Set No. 8 - The Constructor

Build with GIRDERS

BUILD IT...RUN IT...

Realistic
POWER-OPERATED
Structures

SHIPYARD CRANE
ON RAILS
Swivel permits arm
to swing in complete
circle. You can build
and operate many
other types of
cranes.



This set contains 640 pieces:

- 290 Girders
 - 105 Cross & Tie Braces
 - 95 Wall & Roof Panels
 - 24 Roadways & Ramps
 - 60 Building & Road Signs
 - 8 Flagpoles & 12 Flags
 - 2 Marceques
 - 8 Masonite Footings
 - 1 Masonite Foundation
 - 1 Motor Unit
 - 1 Power Unit
 - 1 Elevator Cab
 - 1 Swivel Set
 - 1 Conveyor Belt
 - 6 Conveyor Hooks
 - 1 Gate Assembly
 - 36 Mechanized Parts: Pulleys, Fasteners, Rings, etc.
- Illustrated Planning Books

ARCHED DRAW BRIDGE
Both spans raise and lower simultaneously.
This is just one of many different types of
Draw Bridges, Lift Bridges or Swivel
Bridges you can build.

Design, Build and Operate DRAW BRIDGES, CRANES, CONVEYORS, CABLE CARS, AMUSEMENT RIDES, RADAR STATIONS, BUILDINGS with ELEVATORS and many more Battery-Operated Structures

Also Design and Build Unlimited Variety of Modern Skyscrapers, Realistic Turnpikes,
Railroad and Highway Bridges, Railroad Stations, Airports and Cantilever Buildings of all kinds.

Can be combined with any Kenner Girder & Panel or Bridge & Turnpike Building Set
and be used with any size train, "H-O" to "O" gauge.

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KENNER PRODUCTS COMPANY - CINCINNATI 2, OHIO

Made in U.S.A.
Printed in U.S.A.



BUILDING with ELEVATOR
Elevator stops at any floor, up or down.

Easy-to-Use BASIC PARTS that SNAP TOGETHER

Construct the framework of GIRDERS like structural steel on masonry footings and foundations...

Attach pulleys and cables and connect MOTOR and POWER UNITS for elevators and working mechanisms...

Build on the walls and roofs of buildings with prefab PANELS. Use BRACES and ROADWAYS for bridges, ramps and open structures

POLYETHYLENE
GIRDERS

PANELS

MOTOR & POWER UNITS
Use 2 "C" size batteries

POLYETHYLENE
MECHANIZED PARTS
AND ACCESSORIES

BRACES

ROADWAYS

ALL HIGH STRENGTH PLASTIC PARTS that interlock to form rigid structures.



COMPLETE PROGRESSIVE INSTRUCTIONS for using all the parts in Kenner's **MOTORIZED Girder & Panel and Bridge & Turnpike Building Sets**

To make the instructions as clear as possible, this is divided into three sections:

- SECTION A** • This starts you off with the simplest to use, the Girder & Panel Sets, which contain only three basic building parts. These parts can be used in unlimited combinations to build all the buildings shown in the Girder & Panel Planning Book. It is suggested that you build at least one or two buildings before taking up the second section . . .
- SECTION B** • Explains the uses of the Bridge & Turnpike building parts, enabling you to build any of the bridges and turnpike features pictured in the Bridge & Turnpike Planning Book. You can also combine bridges and buildings into very interesting structures, then go on to the third section . . .
- SECTION C** • This shows, by means of diagrams and references to illustrations in the 12-page *Motoring Project Book*, how to build a set into many different kinds of structures.

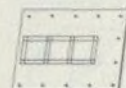
Section A • Instructions for building with Kenner's GIRDER & PANEL BUILDING SETS

PLEASE READ THIS FIRST! The basic idea of Girder and Panel construction is so easy that any child can build many buildings. But these sets go farther than that, allowing full scope for his imagination and natural ability. He will soon be designing and building struc-

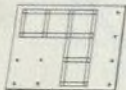
tures of great originality. To provide for this, some special parts are included in the set to fit unusual situations. These are explained in Part II of the instructions. Advanced steps, using modern "cantilever" engineering, are explained in Part III.

PART I - TO START YOUR BUILDING

First take the Masonite foundation board from the bottom of the box.



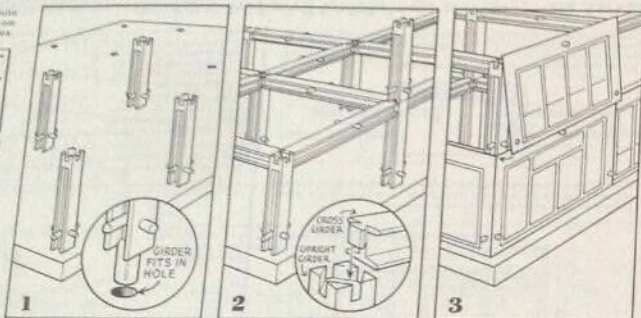
Decide on the shape of the plan for the first floor of your building. Here is a simple plan.



Or you may arrange an "L" shaped first floor.



This is a "U" shaped plan like the building in the big picture on the box lid.



UPRIGHT GIRDERS

Start by standing up the upright girders in the holes in the foundation board. Every upright girder has four slots in its top. The cross girders will fit into these slots, so turn the upright girders so that these slots line up in a straight line.

CROSS GIRDERS

Fit the ends of the cross girders into the slots of the upright girders, so that the tops are level with each other. When the first story framework is finished, place the second story uprights into the tops of the first story uprights and proceed until the framework is finished.

WALL PANELS

Place the wall panels on the framework by snapping the three hole over the rivets on the girders. Start at the first floor and work up, so the upper panels will overlap the lower ones. For best appearance, panels should be chosen carefully and should not be attached in a random fashion.

SIGNS • Signs are attached by snapping the single hole over one of the girder rivets. Generally, the signs are put on the center rivet on the cross girder above an entrance or show window. These signs should be put on before the panels of the upper story are attached. Any signs, however, may be put on any other rivet, if desired.

ROOF PANELS • After walls are completed, the roof panels are fitted into the square formed by the girders of the top story. Again, the type of panel (skylight or plain) should be chosen carefully for best appearance.

FLAGS and PENNANTS • Insert the flag into the flagpole by placing the notch in the flag under the top hook of the flagpole and wedge the flag between the two hooks. Then place the flagpole into the square hole in top of an upright girder, making sure that the oval sides at the base of the flagpole are directly against the walls of the hole.

• • • Page 1 • • •

Continued on page 2 . . .



Here is an example of the tremendously interesting structures you can build with Set No. 9. This is a double Observation Tower. The elevator in the foreground takes passengers to the roof, from where they ride the Cable Car to the opposite tower. A Special Roadway is provided for those who prefer to drive up. (For another view of this structure see page 9.)

BUILD IT...RUN IT...

This book shows actual photos of 30 structures built with Kenner's Motorized Building Sets, with a number of detail photos and diagrams to aid you in building them. Set No. 9 will build everything shown in this book; Set No. 8 will build everything on pages 2 through 7.

In addition, you can build any of the structures shown in the Girder & Panel and Bridge & Turnpike Planning Books and make them come to life with the battery-operated mechanized parts.

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Kenner's **MOTORIZED GIRDER & PANEL and BRIDGE & TURNPIKE**

BUILDING SET

SPECIAL PROJECT BOOK for Set No. 8 and Set No. 9



This Elevator Building is easy to build with Set No. 8. You may want to try it as your first project with this set.

FACTORY BUILDING WITH HOOK CONVEYER

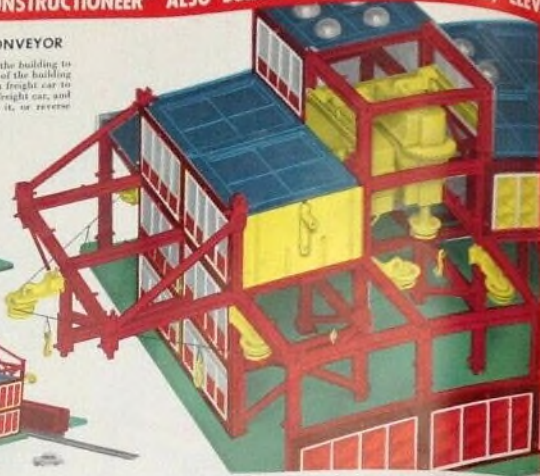
The hook conveyer runs from the railroad siding through the building to the truck loading area, then returns through the other side of the building to make a complete circuit. It can carry small items from freight car to truck or from truck to freight car, and you can stop it, start it, or reverse it at any point.



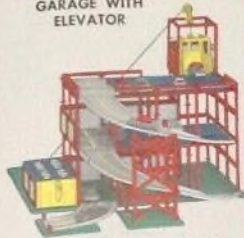
The above two views show the building from the railroad siding and the truck loading ends. Compare the lower picture with the detail at the right, which is an enlarged view of the front corner of the building. Several roof and wall panels are removed to show details of the motor and pulley

arrangement. This is the photo referred to in item 11 on page 7 of the Instructions. The motor is mounted vertically. In that instance the middle pulleys in the motor base fit onto two beams, whereas here the lower corner

pulleys fit onto the beams and a pair of middle beams are fitted into the upper corner notches. The two pulley brackets (one on each middle beam) serve as clamps to hold the base of the motor unit snug against the columns behind the unit.



MODERN PARKING GARAGE WITH ELEVATOR



This is a new garage design, planned for efficient operation. During the morning rush, when many cars are arriving and only a few are leaving, the elevator is used to bring down the cars that are going out, as the ramps are kept free for up-traffic only. In the late afternoon when the situation is reversed, cars can leave in an uninterrupted flow down the ramps while incoming cars go up in the elevator.

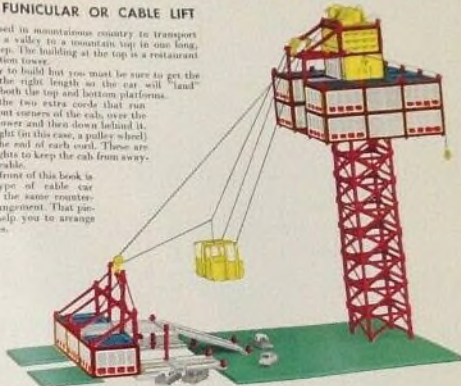
RESORT FUNICULAR OR CABLE LIFT

These are used in mountainous country to transport people from a valley to a mountain top in one long, thrilling sweep. The building at the top is a restaurant and observation tower.

It is easy to build but you must be sure to get the cable just the right length so the car will "land" properly at both the top and bottom platforms.

Notice the two extra cords that run from the front corners of the car, over the top of the tower and then down behind it. A small weight (in this case, a pulley wheel) is tied to the end of each cord. These are counterweights to keep the car from swinging on the cable.

On the front of this book is another type of cable car which has the same counterweight arrangement. That picture will help you to arrange these cables.



AIRPLANE RIDE

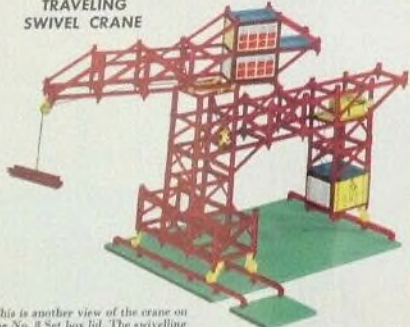
A wonderful "fun" structure such as you will find at many amusement parks. You can use any small plastic or metal airplanes about 4 to 6 inches long. They should all weigh about the same in order to keep in balance. Or you can fold some airplanes out of paper.



The enlarged view at the right shows in detail the construction of the rotating top section, which is built onto a swivel. The cable passes around a drive pulley on the motor shaft and is guided through pulley brackets to the top of the tower. There it goes around the swivel pulley and back down to the drive pulley. The enclosed area at the base is used for lunch counters and amusement concessions.



TRAVELING SWIVEL CRANE



This is another view of the crane on the No. 8 Set box lid. The swivelling action is not motor driven, but you can swing the boom by hand in a complete circle. The cable, which is motor driven, runs from the motor spool through the loop of a bracket located below the swivel, then up through the hole in the center bearing of the swivel. Thus the cable will not bind or tangle when the swivel is turned. The rails are beams placed upside-down on stub girders.

TRAVELING BRIDGE CRANE



This type of crane is used in factories, steel mills, and docks. The rails run the length of the structure, and the crane moves from one end to the other, carrying heavy loads to any part of the working area.

If you want to build a crane like this with longer rails, you can cut down the height and width (like this diagram) and use the parts thus saved to make the supporting structure and rails longer.

