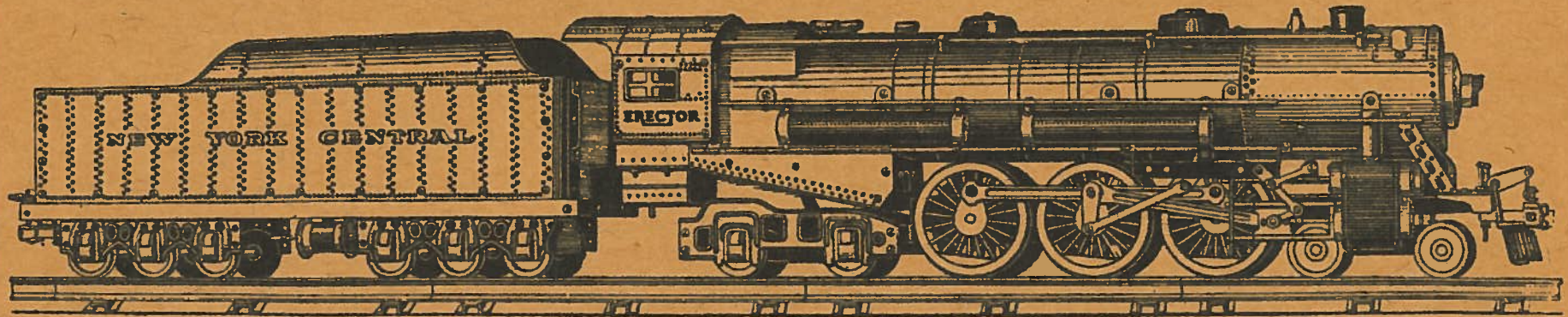


MANUAL OF INSTRUCTIONS
THE NEW
ERECTOR

THE ONLY CONSTRUCTION TOY WITH THE SQUARE GIRDER

No. 8½
The Set that Builds
**THE LOCOMOTIVE
AND TENDER**
and 405 other models



THE A. C. GILBERT COMPANY — New Haven, Conn. U. S. A.

M1345
Printed in U. S. A.

In England: THE A. C. GILBERT COMPANY, 109 Kingsway, London, W. C. 2

Copyright 1931 The A. C. Gilbert Company, New Haven, Connecticut, U. S. A.



Hello Boys!

I want to explain to you all about the Erector Family, the World's Standard in Construction Toys.
The Old Plan : —

The old type of Accessory Set merely converted one size construction toy set into the next higher-priced set. It mainly provided more parts of the same kind you already had.

The New Plan : —

Now when you obtain an Accessory Set, it will match with any standard Erector Set and in addition, the New Erector Family of Accessory Sets are complete units in themselves.

The Regular Erector Sets consist of :

- No. 1 Dandy Beginner's Set. Builds the Square Girder and over 100 other models.
- No. 3 The Set with the Long Girders. Builds over 200 models.
- No. 4 The Famous No. 4 with Powerful Electric Motor and Gear Box. Builds over 300 models.
- No. 6 The Wonderful No. 6. The set that builds the Boiler Models and over 325 others.
- No. 7 The new Big No. 7. The set that builds the Steam Shovel and over 350 other models.
- No. 7½ The Sensational No. 7½ Erector. The set that builds the Chassis and over 400 other models . .
- No. 8 The Twentieth Century No. 8. The set that builds the Super Locomotive and over 398 other sensational models
- No. 8½ The World's Champion No. 8½. The set that builds the Super Locomotive and Tender and 405 other sensational models.
- No. 9 Mechanical Wonder Set, with 110 volt Motor. The set that builds the Zeppelin and over 450 other models.
- No. 10 Deluxe Set, Builds all Erector Feature Models and over 500 others

These New Accessory Sets are for the purpose of featuring and specializing in certain types of Trumodel building, Construction Equipment, Electrification, Locomotive building, etc.

The New Erector Family of Accessory Sets consists of : —

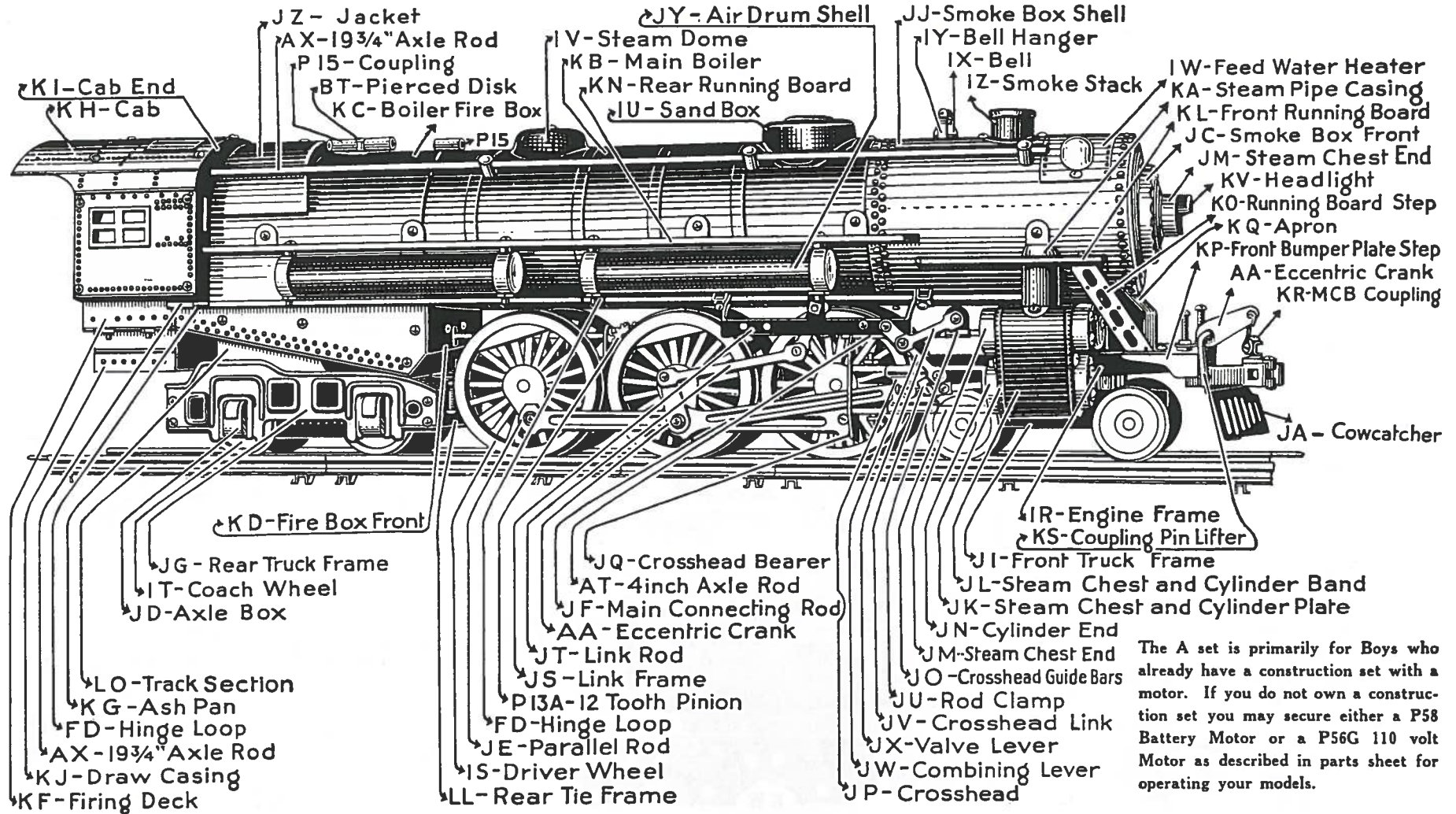
- No. A The Set that builds the Locomotive and over 12 other models.
- No. B Big Girder Set. The Set That Builds the Ferris Wheel and over 57 other models
- No. 3005 Erector Electrical Set. The Set that Electrifies and Illuminates

THERE ARE WORLDS OF FUN IN ANY ERECTOR SET

Your Friend,

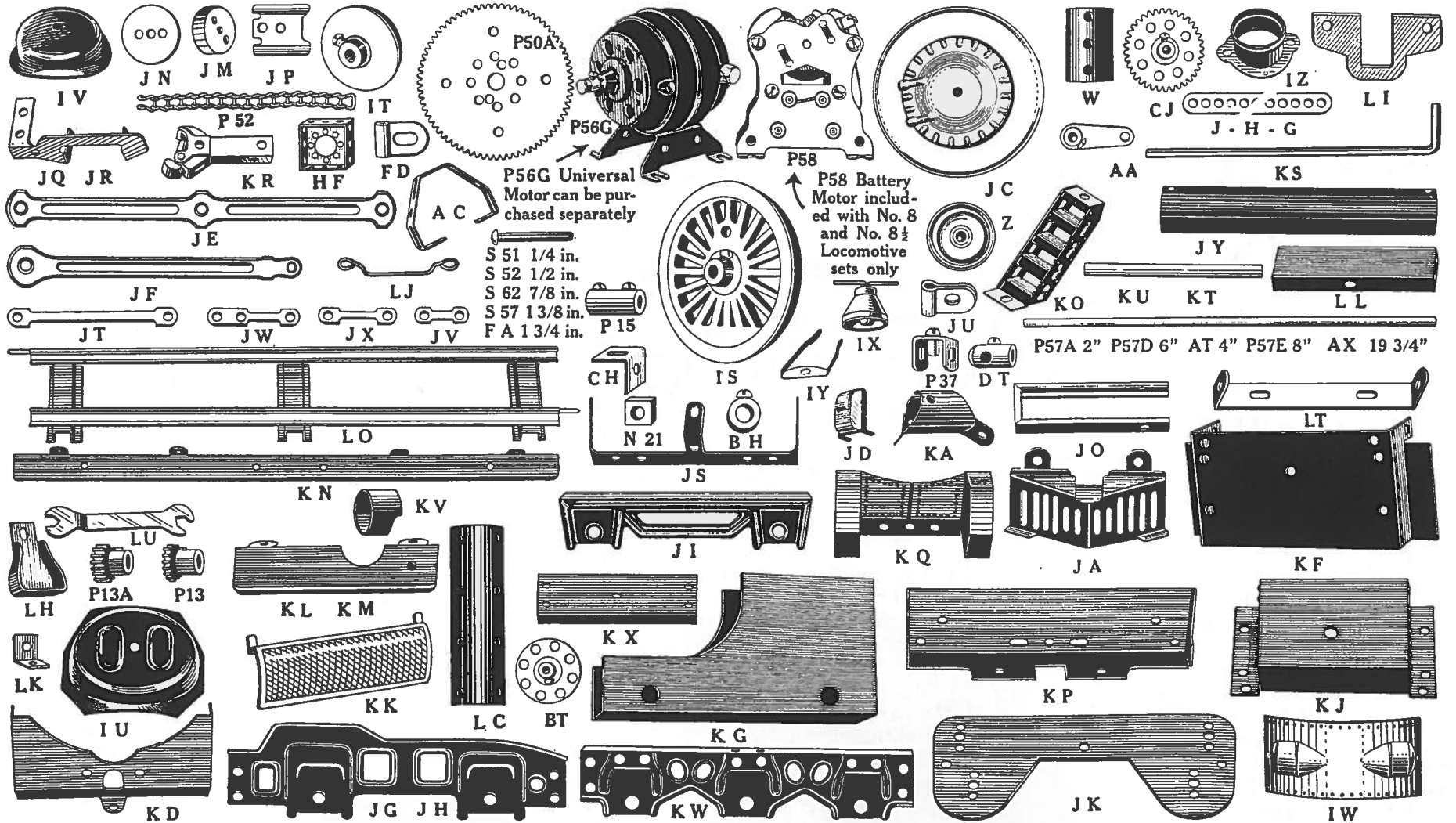
Models Built with No. A Set

SECTION A

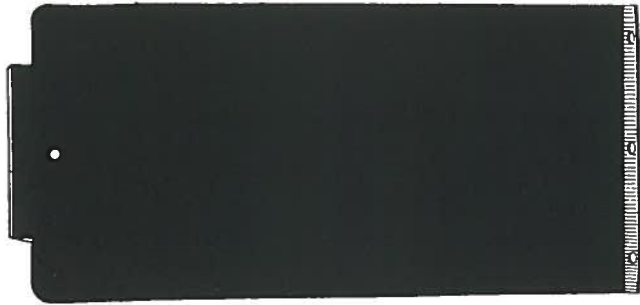


The A set is primarily for Boys who already have a construction set with a motor. If you do not own a construction set you may secure either a P58 Battery Motor or a P56G 110 volt Motor as described in parts sheet for operating your models.

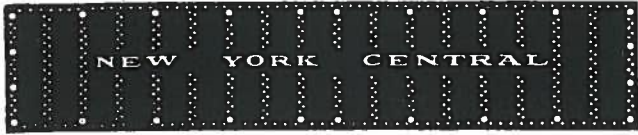
Locomotive and Tender Separate Parts



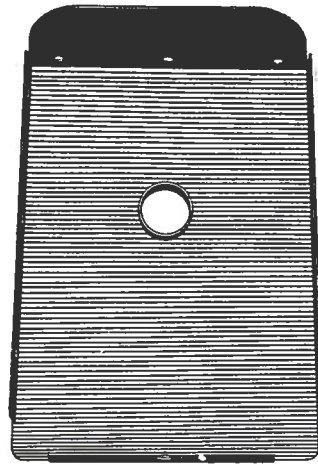
Locomotive and Tender Separate Parts



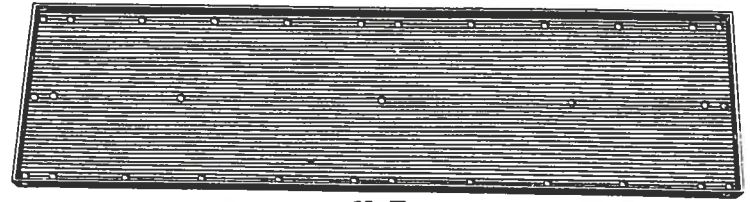
LG



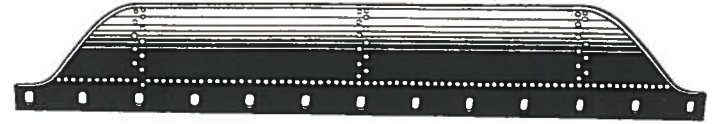
LA



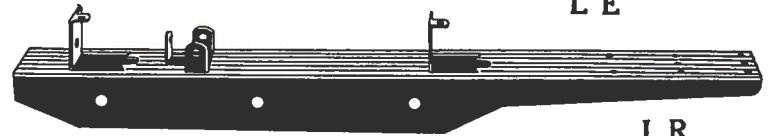
LF



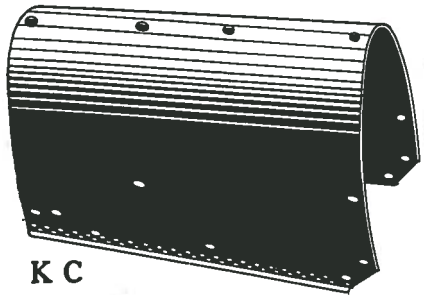
KZ



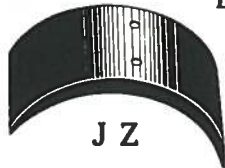
LE



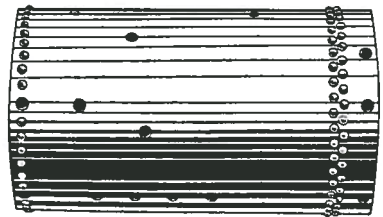
IR



KC



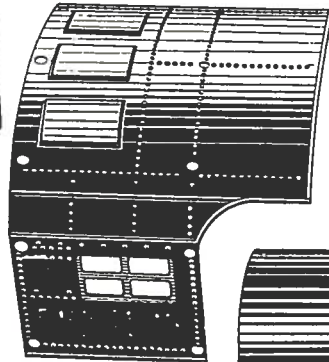
JZ



JJ



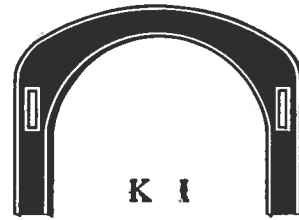
JL



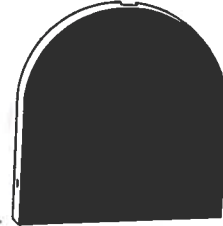
KH



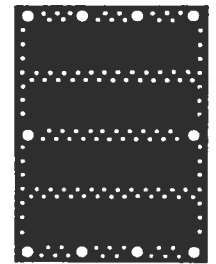
LS



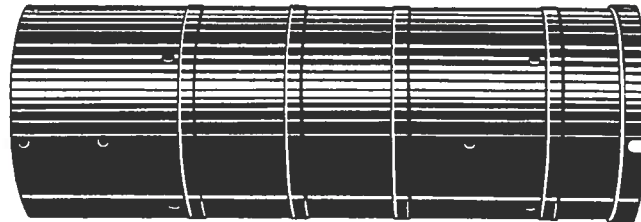
KI



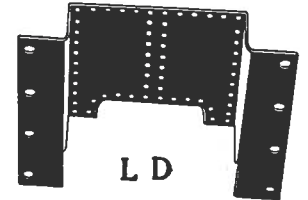
KE



LB



KB



LD

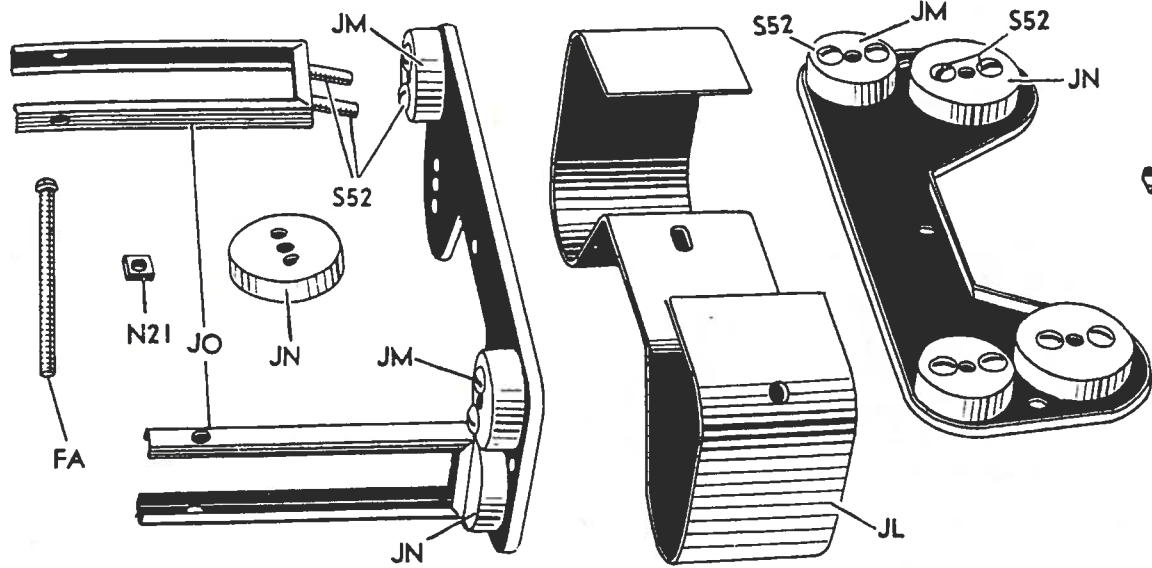
LOCOMOTIVE AND TENDER SEPARATE PARTS PRICES

Most all dealers carry Locomotive and Tender Separate Parts. If unable to obtain in your city, send us your check, money order or stamps for the parts you want and we will be glad to send your order direct from here if you will send us the name of your dealer.

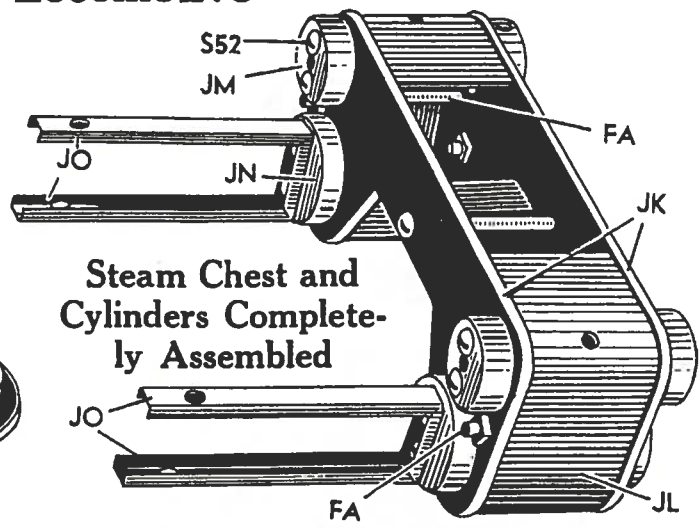
A. C. GILBERT COMPANY, NEW HAVEN, CONN., U. S. A.

Trade No.	Name of Part	Page	Price	Trade No.	Name of Part	Page	Price	Trade No.	Name of Part	Page	Price	Trade No.	Name of Part	Page	Price
IR	Engine Frame	3	\$.35 ea.	JW	Combining Lever	2	2 for .05	HF	Butt End Plate	2	.10 ea.	FD	Hinge Loop	2	2 for .05
IS	Driver Wheels	2	.30 ea.	JX	Valve Lever	2	3 for .05	FA	1 1/4" x 8-32 screw	2	.20 doz.	CH	Right Angle	2	.10 doz.
IT	Coach Wheel	2	.15 ea.	JY	Air Drum Shell	2	.05 ea.	JY	Rear Tie Frame	2	.05 ea.	AA	Eccentric Crank	2	.10 ea.
IU	Sand Box	2	.10 ea.	JZ	Jacket	3	.10 ea.	KW	Truck Frames	2	.10 ea.	H	11 Hole Strip	2	.15 doz.
IV	Steam Dome	2	.05 ea.	KA	Steam Pipe Casing	2	.05 ea.	KX	Truck Bolster	2	.05 ea.	W	Stack	2	.05 ea.
IW	Feed Water Heater	2	.05 ea.	KB	Main Boiler	3	.35 ea.	KZ	Tender Base Plate	3	.50 ea.	Z	Flanged Wheel	2	.15 ea.
IX	Bell	2	.15 ea.	KC	Boiler Fire Box	3	.10 ea.	LB	Tender Back Plate	3	.10 ea.	P58	Motor, 6 to 24 volt	2	.95 ea.
IY	Bell Hanger	2	.05 ea.	KD	Fire Box Front	2	.05 ea.	LC	Corner Plate	2	.05 ea.	P56G	Motor, 110 volts	2	3.95 ea.
IZ	Smoke Stack	2	.10 ea.	KE	Boiler Backhead	3	.10 ea.	LD	Front Fuel Board	3	.10 ea.	P52	Ladder Chain 11 in. Long	2	.15 ea.
JA	Cow Catcher	2	.15 ea.	KF	Firing Deck	2	.10 ea.	LE	Side Fuel Board	3	.20 ea.	P57A	2 in. Axle Rod	2	.02 ea.
JC	Smoke Box Front	2	.15 ea.	KG	Ash Pan	2	.10 ea.	LA	Tender Side Plate	3	.45 ea.	AT	4 in. Axle Rod	2	.04 ea.
JD	Axle Box	2	.05 ea.	KH	Cab	3	.50 ea.	LF	Back Fuel Bd with Deck	3	.30 ea.	P57D	6 in. Axle Rod	2	.06 ea.
JE	Parallel Rods	2	.05 ea.	KI	Cab Ends	3	.50 ea.	LG	Fuel Slide	3	.20 ea.	P57E	8 in. Axle Rod	2	.08 ea.
JF	Main Connecting Rods	2	.05 ea.	KJ	Draw Casing	2	.10 ea.	LH	Tender Step	2	.05 ea.	AX	19 1/2 in. Axle Rod	2	.20 ea.
JG	Rear Truck Frame, right	2	.10 ea.	KL	Front Runng Board, right	2	.10 ea.	LI	Coupling Yoke	2	.05 ea.	DT	One set screw coupling	2	2 for .15
JH	Rear Truck Frame, left	2	.10 ea.	KM	Front Runng Board, left	2	.10 ea.	LJ	Tank Handle	2	.05 ea.	P50A	72 Tooth Gear	2	.30 ea.
JI	Front Truck Frame	2	.10 ea.	KK	Firing Deck Plate	2	.05 ea.	LK	Tender Step Angle	2	.05 ea.	Not Illustrated			
JJ	Smoke Box Shell	3	.20 ea.	KN	Rear Running Board	2	.10 ea.	S51	3/4 x 8-32 Screws	2	.10 doz.	Trade No.	Name of Part	Price	
JK	Steam Chest & Cyl. Plates	2	.10 ea.	KO	Running Board Step	2	.10 ea.	S62	7/8 x 8-32 Screws	2	.15 doz.	G	7 hole strip	\$.10 doz	
JL	Steam Chest & Cyl. Band	3	.10 ea.	KP	Front Bumper Plate Step	2	.10 ea.	S57	1-3/8 x 8-32 Screws	2	.20 doz.	J	41 hole strip	.30 doz.	
JM	Steam Chest End	2	.05 ea.	KQ	Apron	2	.05 ea.	S52	1/2 x 8-32 Screws	2	.12 doz.	S	Large Base Plate — 21 holes	.40 ea.	
JN	Cylinder End	2	.05 ea.	KR	M.C.B. Coupling	2	.45 ea.	N21	8-32 Square Nut	2	.15 doz.	AF	Small Hook	.15 doz.	
JO	Crosshead Guide Bars	2	.05 ea.	KS	Coupling Pin Lifter	2	.01 ea.	BH	Solid Collar	2	2 for .05	IO	Wood Screw	.15 doz.	
JP	Crossheads	2	.05 ea.	KT	1/4" Axle Rod 3 3/4" long	2	.05 ea.	P37	Formed Collar	2	.25 doz.	BN	Regular Turret Plate	.15 ea.	
JQ	Crosshead Bearer, right	2	.05 ea.	KU	1/4" Axle Rod 3 3/4" long	2	.06 ea.	P15	Coupling	2	.10 ea.	BL	Small Washer	.05 doz.	
JR	Crosshead Bearer, left	2	.05 ea.	KV	Headlight	2	.05 ea.	P13	Pierced Disc	2	.10 ea.	DP	12 in. Slotted Angle Strips	6 for \$.50	
JS	Link Frame	2	.05 ea.	LO	Track Section	2	.15 ea.	P13	12 Tooth Pinion	2	.10 ea.	ERECTOR LOCOMOTIVE MANUALS			
JT	Link Rod	2	2 for .05	LS	Jack	3	.05 ea.	P13A	12 Tooth Pinion (Special)	2	.10 ea.	No. A	Locomotive Manual	\$.25 ea.	
JU	Rod Clamp	2	.05 ea.	LT	Motor Support Bracket	2	2 for .05	CJ	36 Tooth Gear	2	.20 ea.	No. 8	Locomotive Manual	\$.25 ea.	
JV	Crosshead Link	2	2 for .05	LU	Offset Wrench	2	.05 ea.	AC	Universal Bracket	2	.10 ea.	No. 8 1/2	Locomotive Manual	\$.50 ea.	

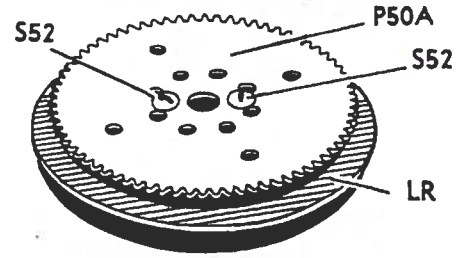
Steps of Progress in Assembly of Locomotive



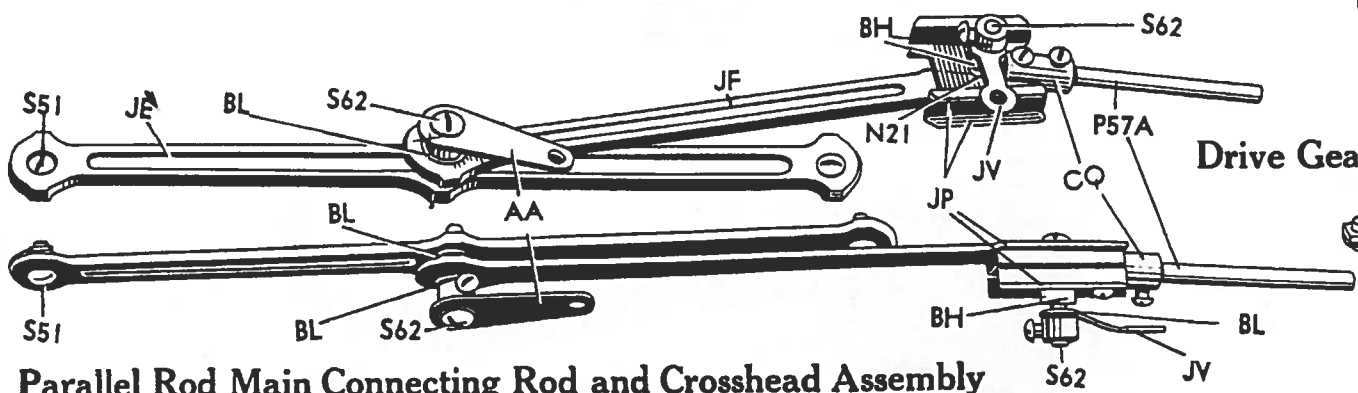
Steam Chest and Cylinders Assembly



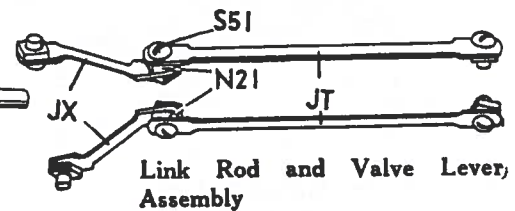
Steam Chest and Cylinders Completely Assembled



Drive Gear and Drive Wheel Assembly

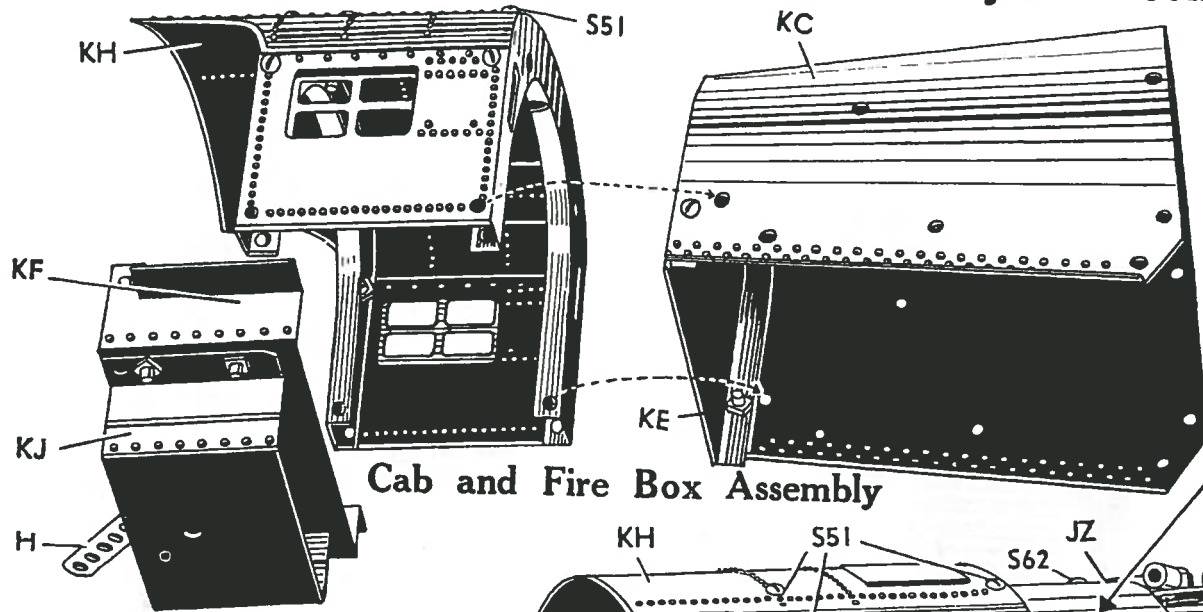


Parallel Rod Main Connecting Rod and Crosshead Assembly

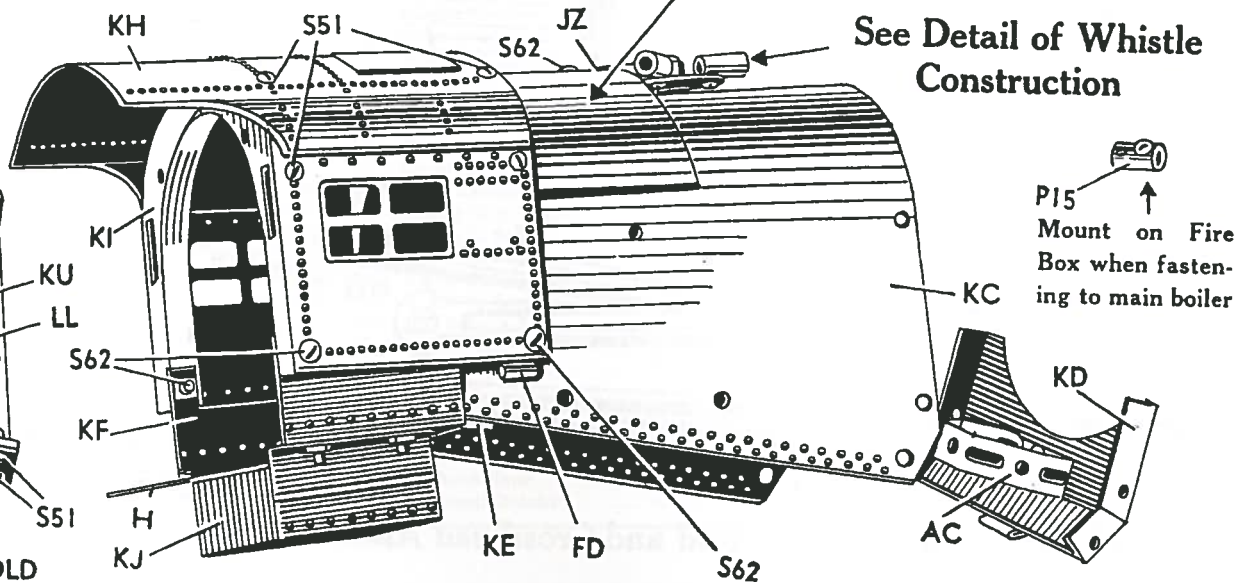
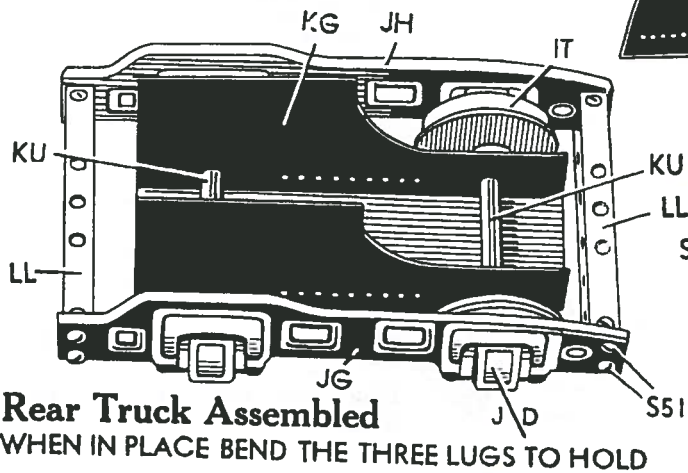


Link Rod and Valve Lever Assembly

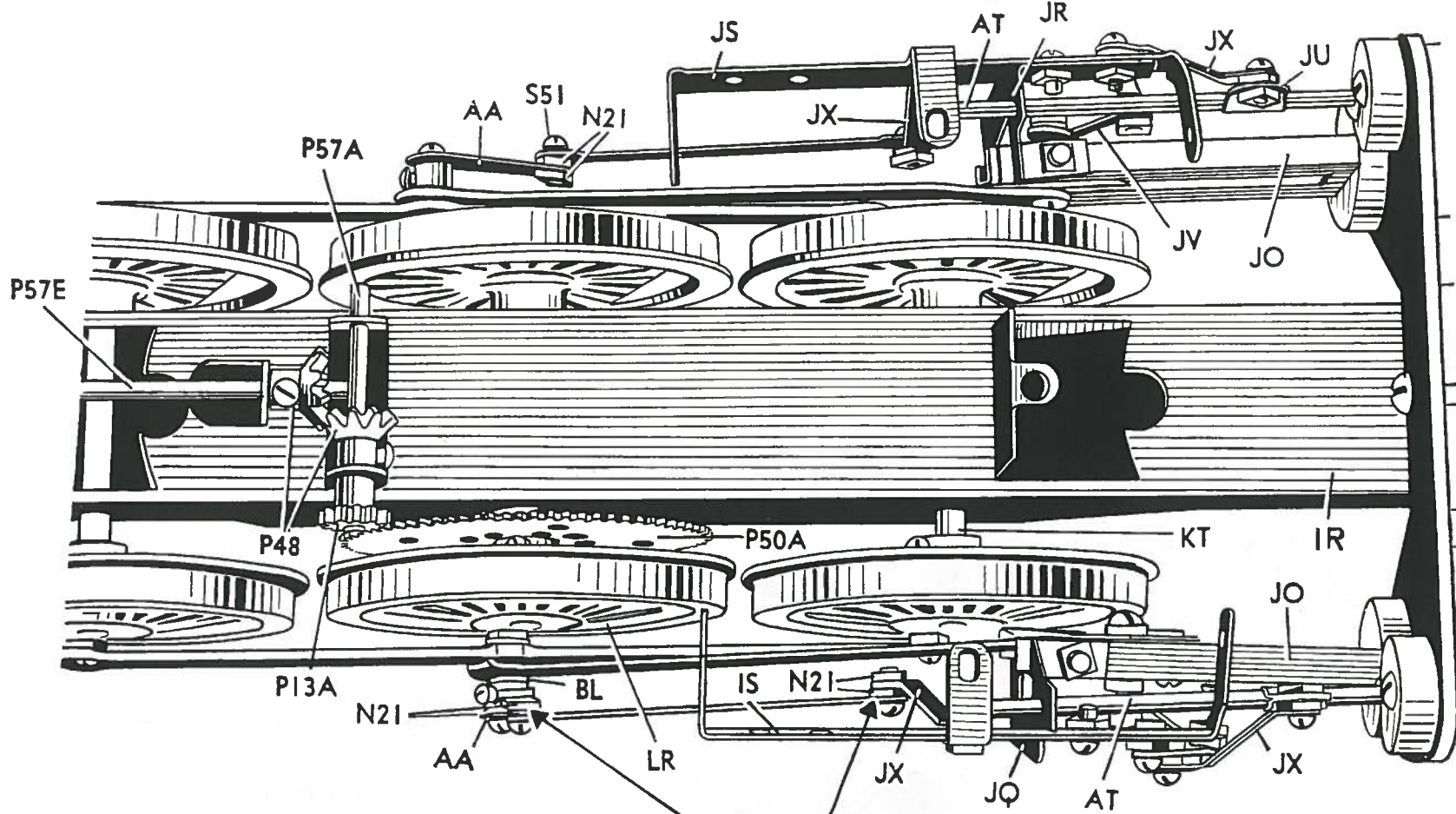
Steps of Progress in Assembly of Locomotive



Cab and Fire Box
Assembled with
Whistle and Jacket



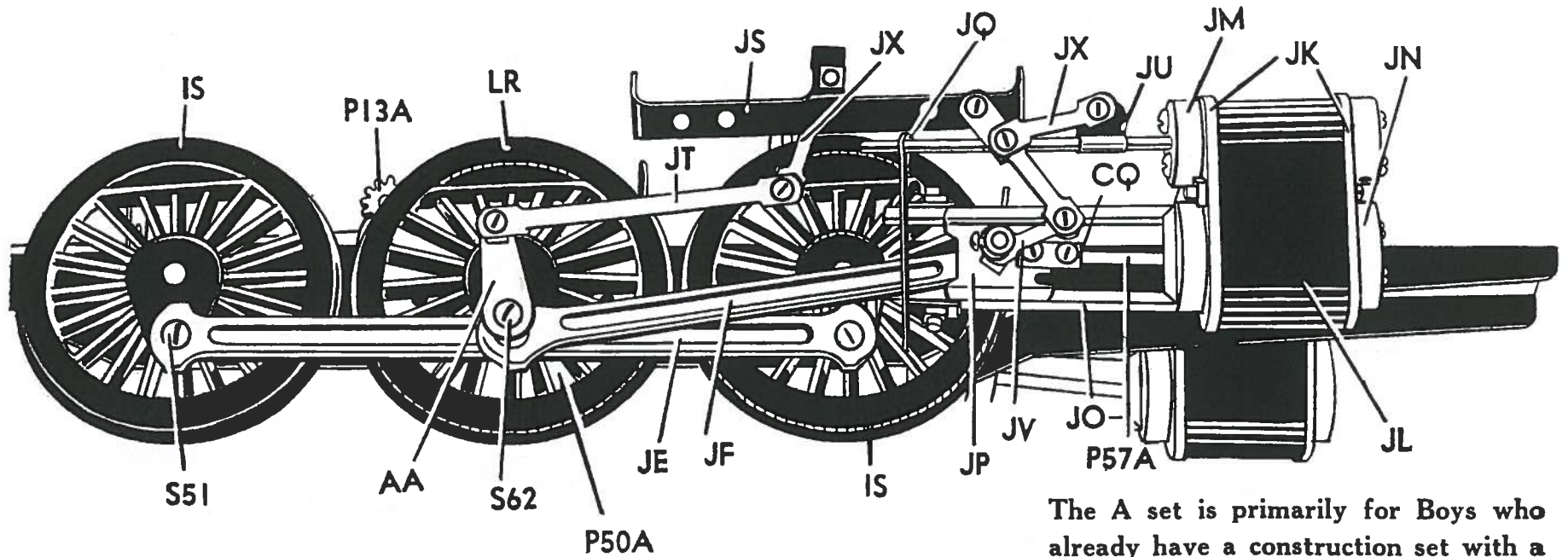
Steps of Progress in Assembly of Locomotive



Top view Engine Frame Assembly showing Gearing, Rod and Lever Construction

Lock all Jam nuts tightly

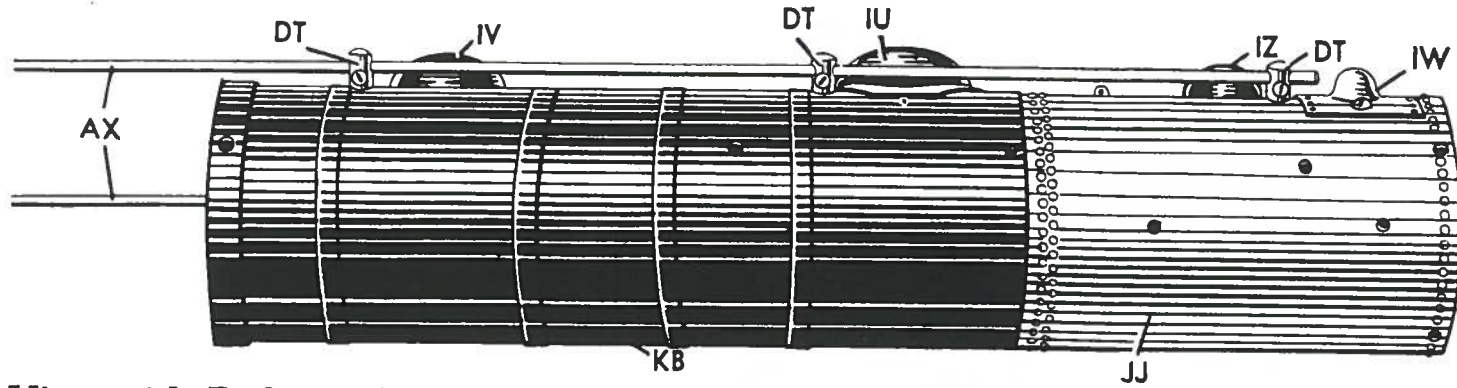
Steps of Progress in Assembly of Locomotive



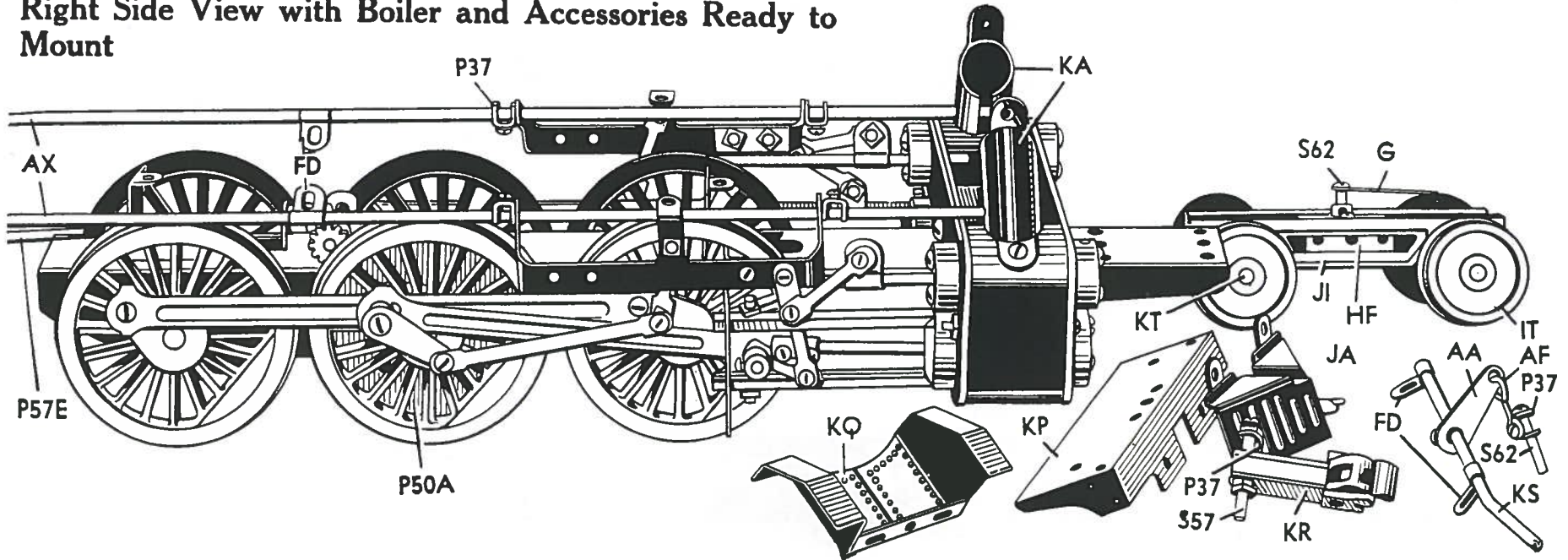
Right side view Driver and Lever constructions

The A set is primarily for Boys who already have a construction set with a motor. If you do not own a construction set you may secure either a P58 Battery Motor or a P56G 110 volt Motor as described in parts sheet for operating your models.

Steps of Progress in Assembly of Locomotive

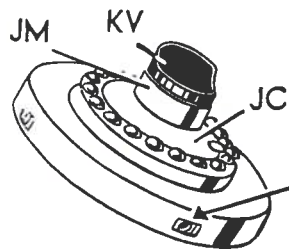
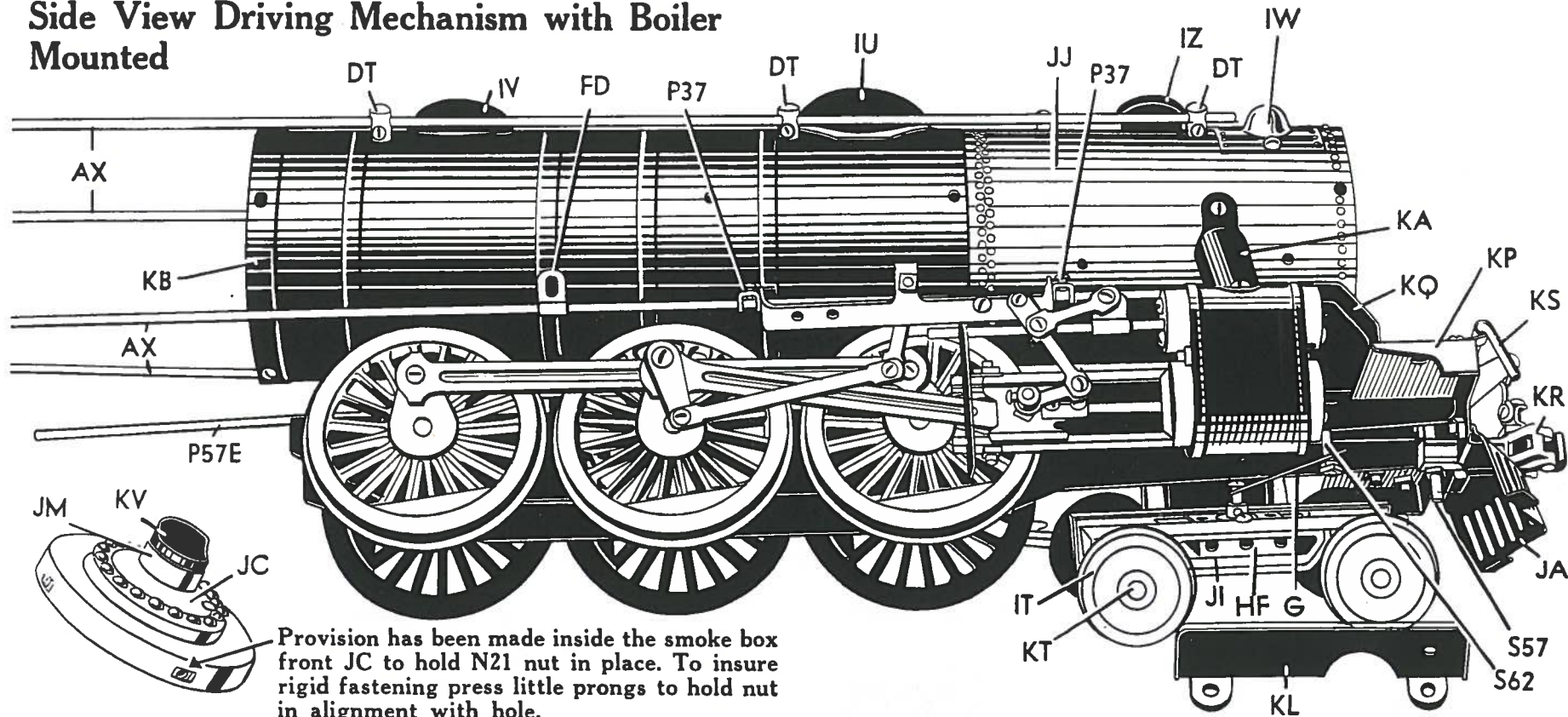


Right Side View with Boiler and Accessories Ready to Mount

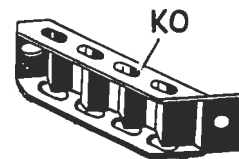
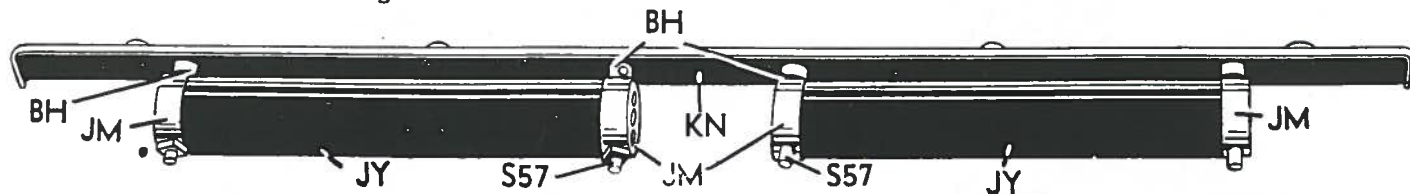


Steps of Progress in Assembly of Locomotive

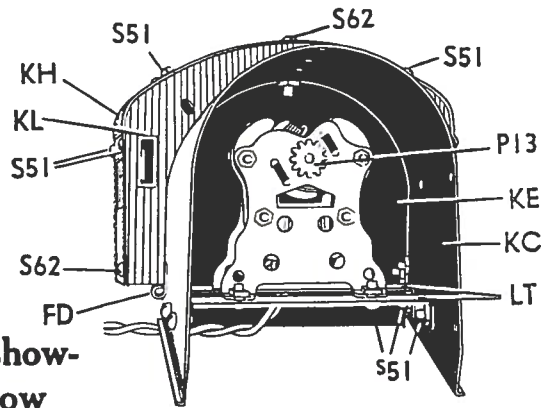
Side View Driving Mechanism with Boiler Mounted



Provision has been made inside the smoke box front JC to hold N21 nut in place. To insure rigid fastening press little prongs to hold nut in alignment with hole.



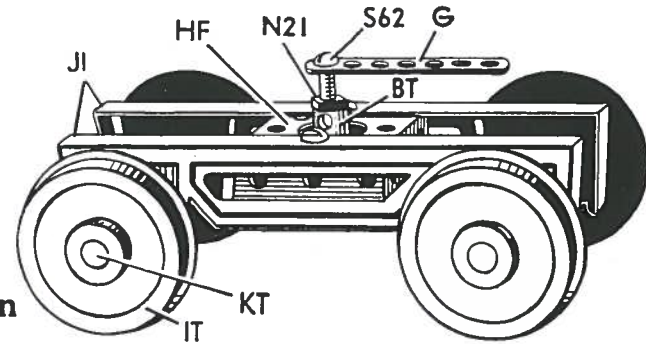
Steps of Progress in Assembly of Locomotive



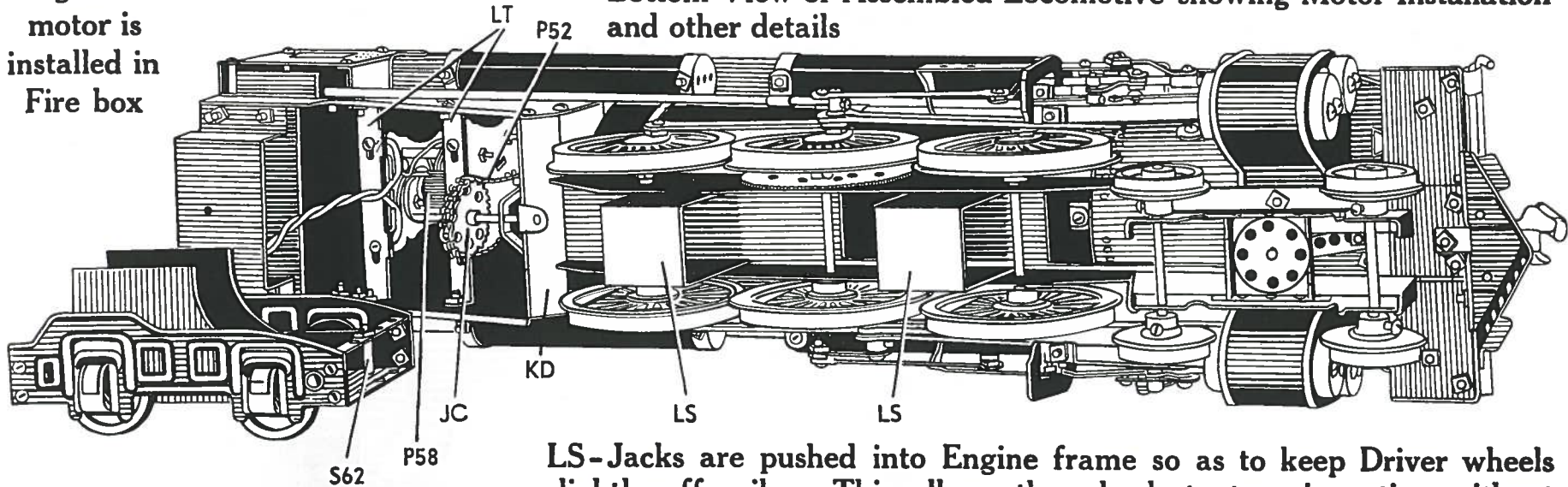
Detail showing how motor is installed in Fire box

The A set is primarily for Boys who already have a construction set with a motor. If you do not own a construction set you may secure either a P58 Battery Motor or a P56G 110 volt Motor as described in parts sheet for operating your models.

Front Truck Construction

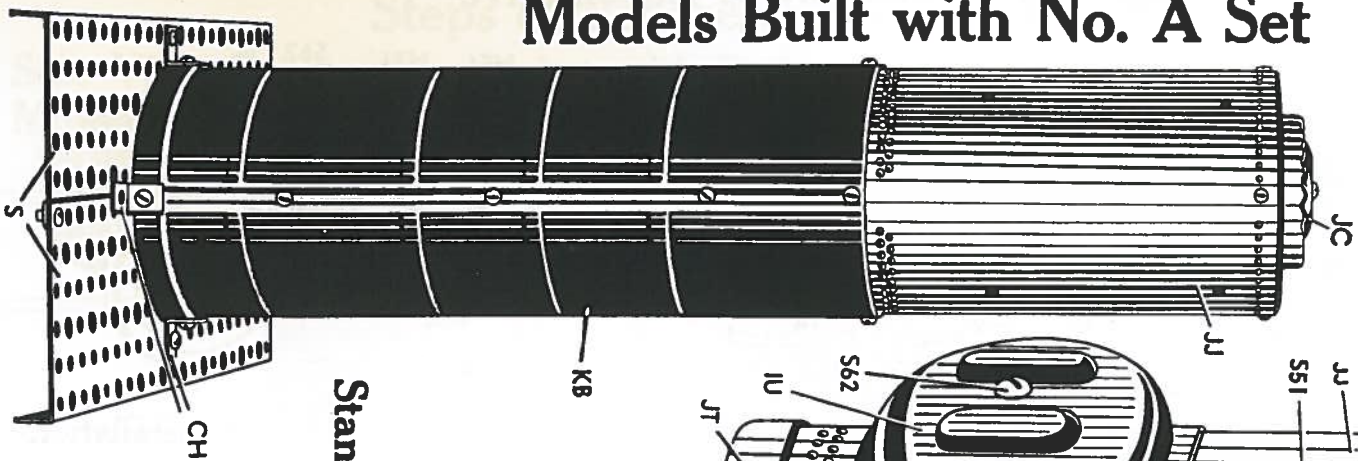


Bottom View of Assembled Locomotive showing Motor Installation and other details

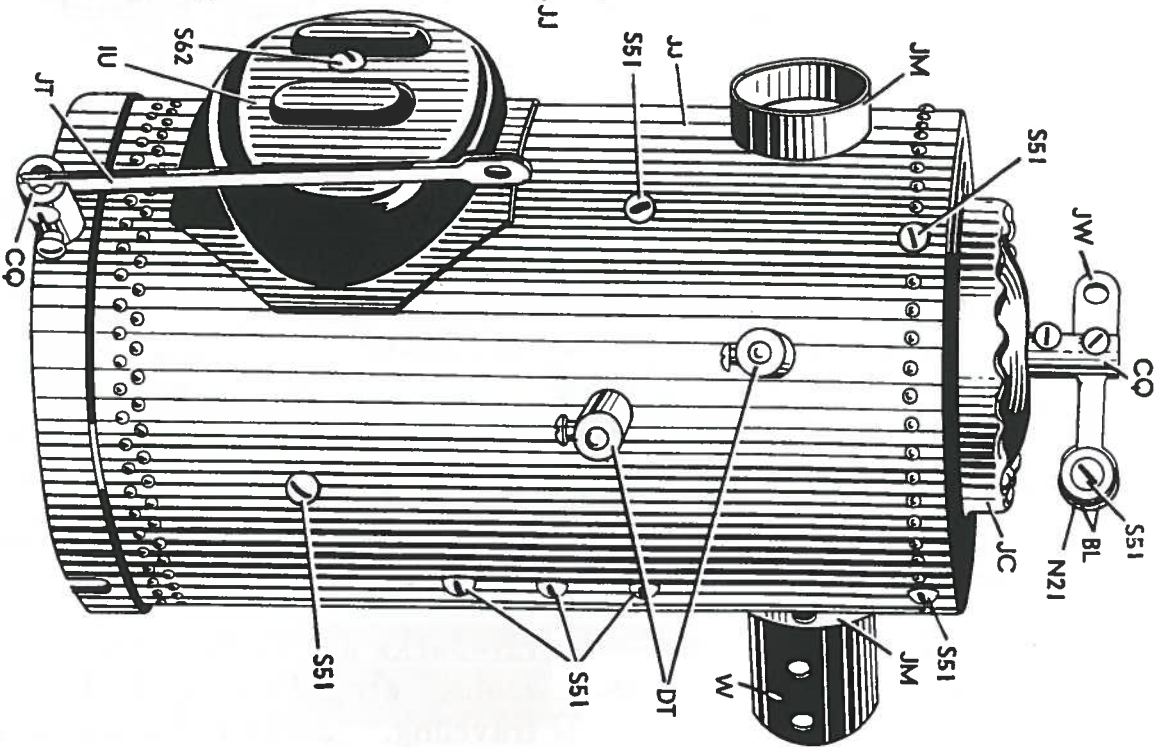


LS-Jacks are pushed into Engine frame so as to keep Driver wheels slightly off rails. This allows the wheels to turn in action without traveling. Jacks to be removed when traveling on rail.

Models Built with No. A Set



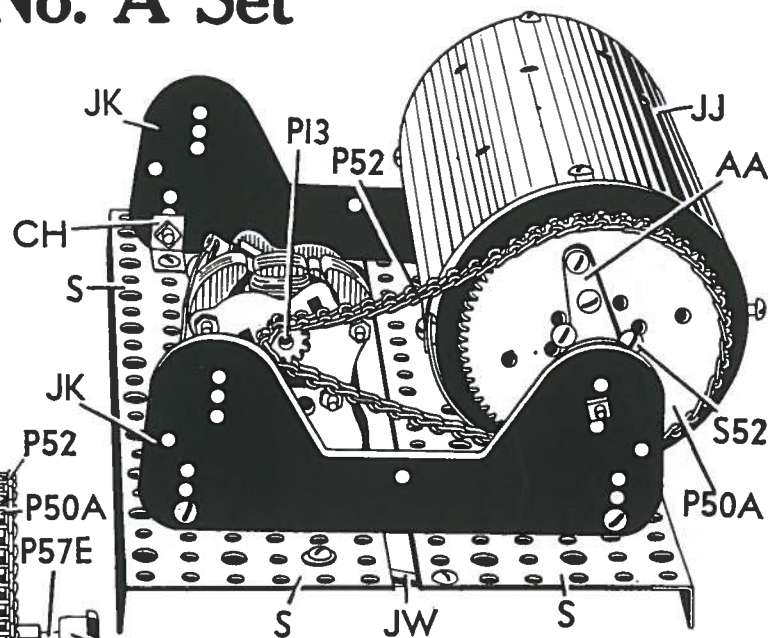
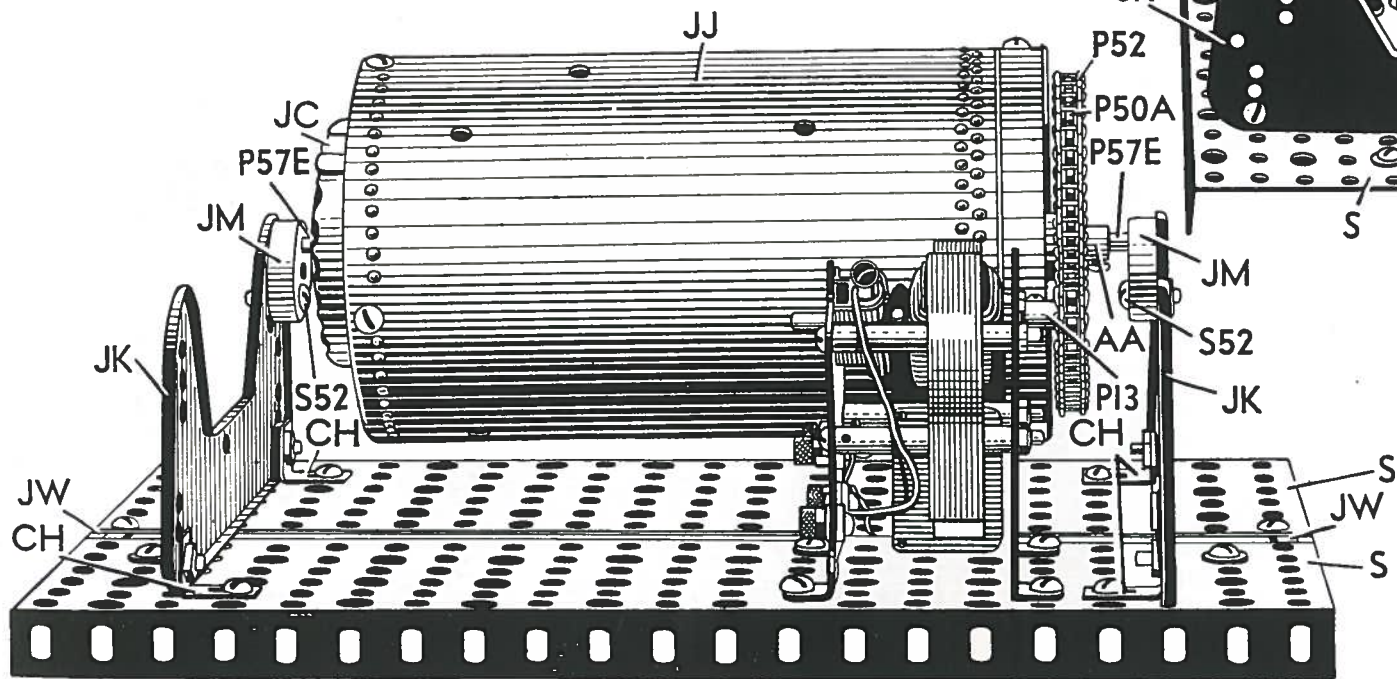
Standpipe



Hot Water Heater

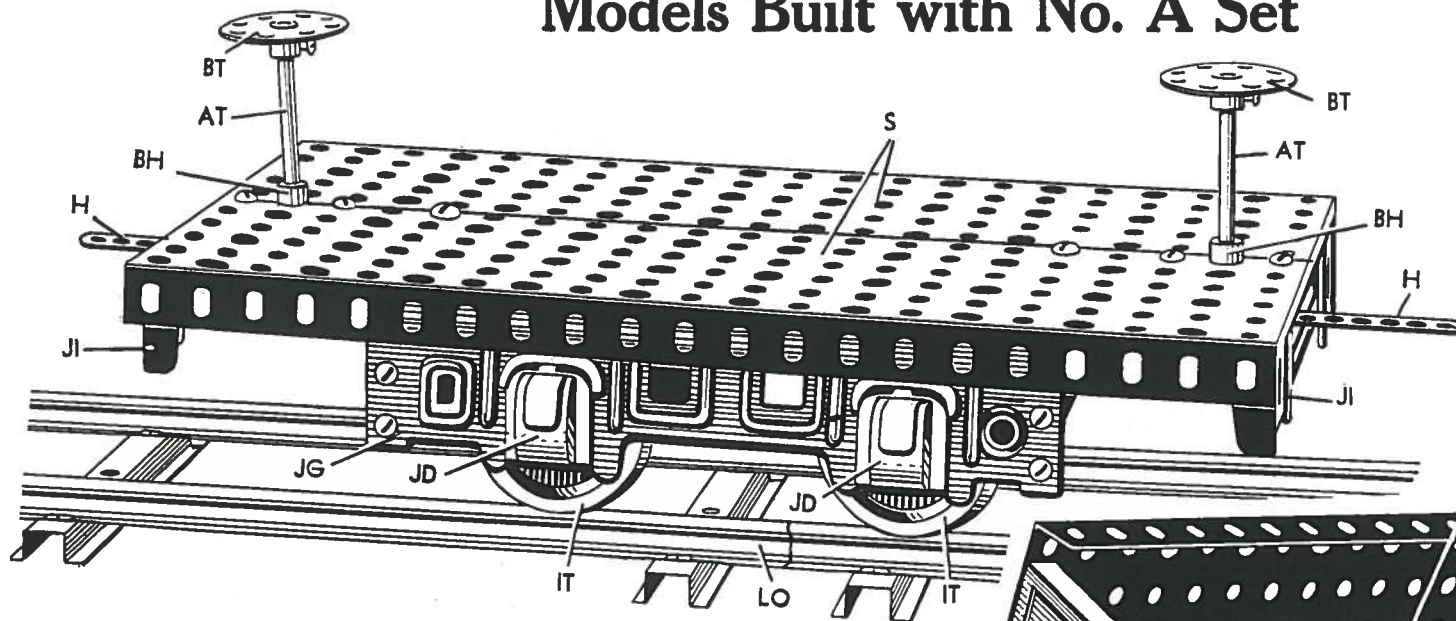
Models Built with No. A Set

Rolling Barrel – Front View



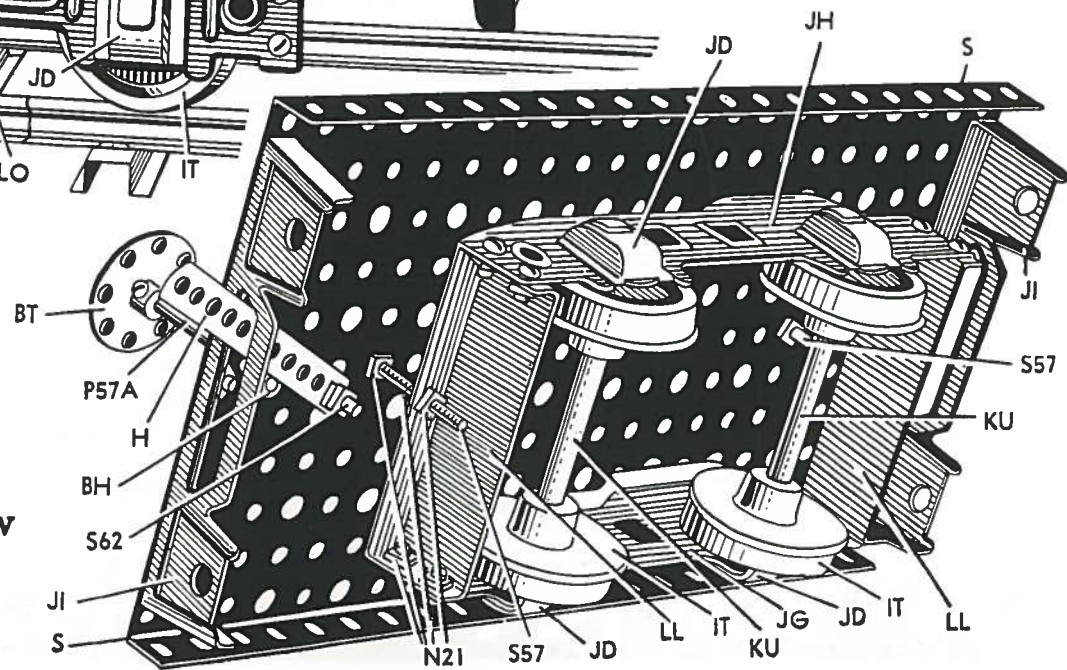
Rolling Barrel – Detail End View

Models Built with No. A Set



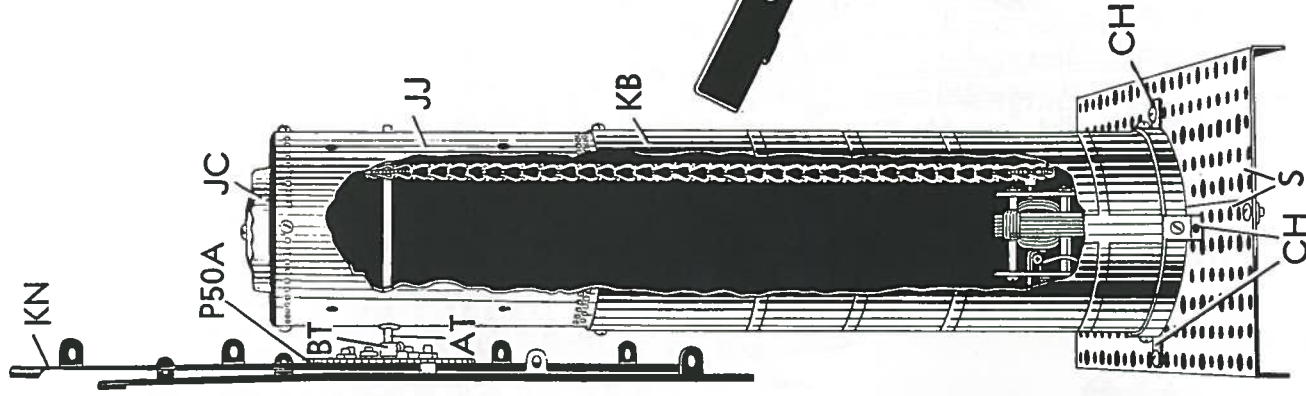
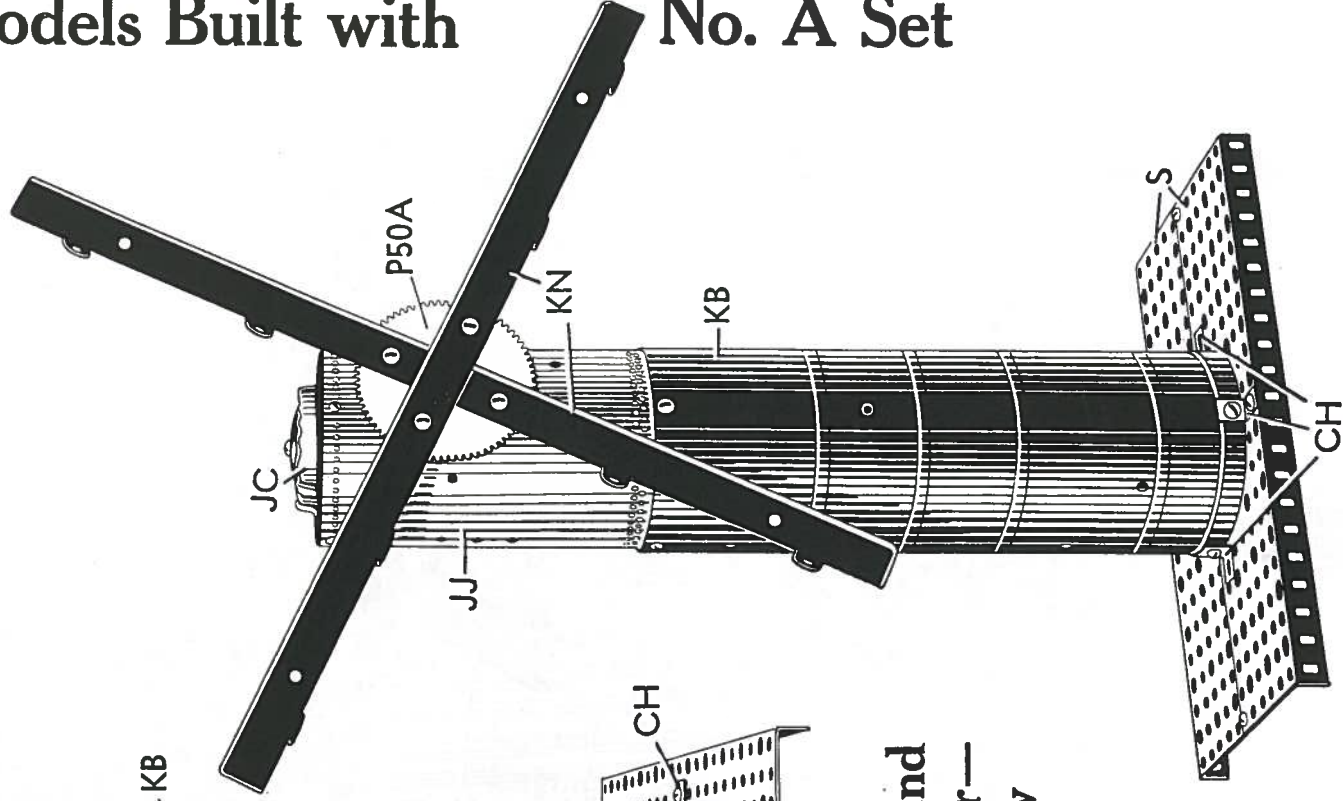
Single Truck -- Flat Trailer

Single Truck --
Flat Trailer -- Underneath View



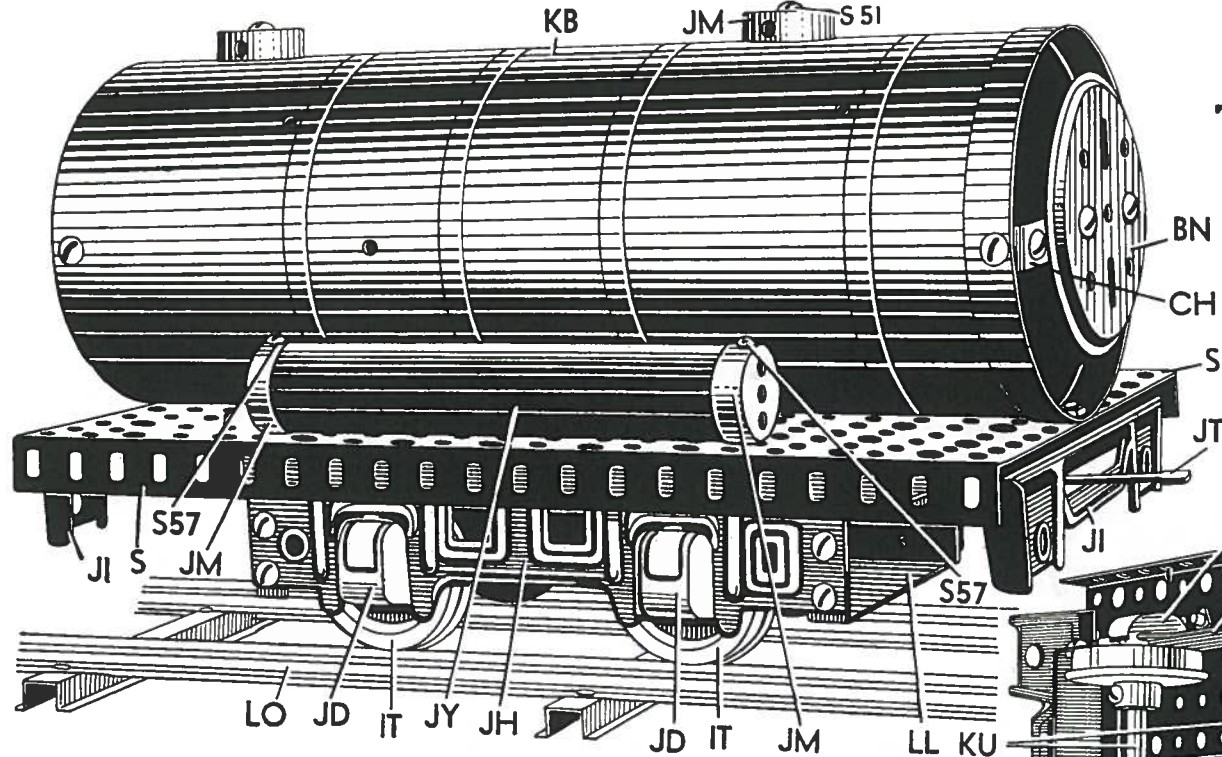
Models Built with No. A Set

Windmill and Watertower— General View



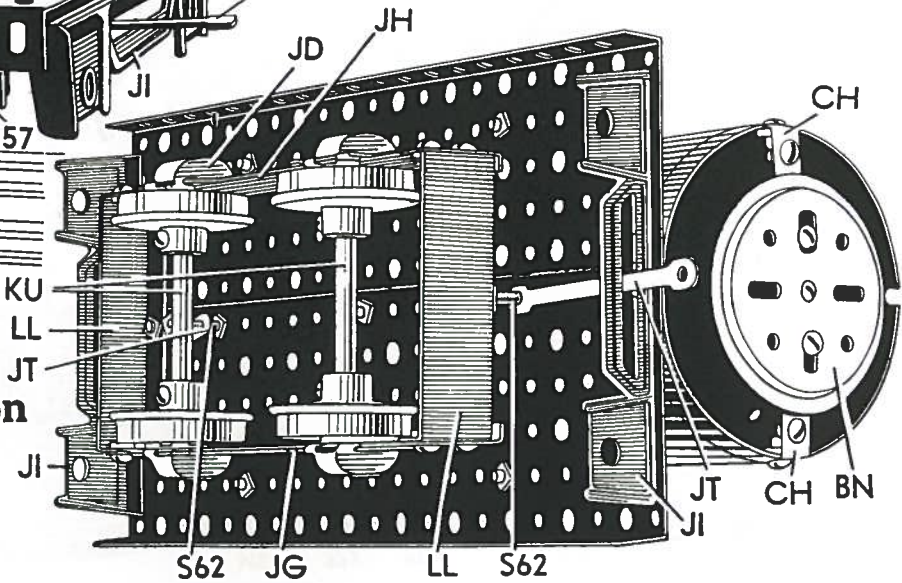
Windmill and Watertower— Side View

Models Built with No. A Set



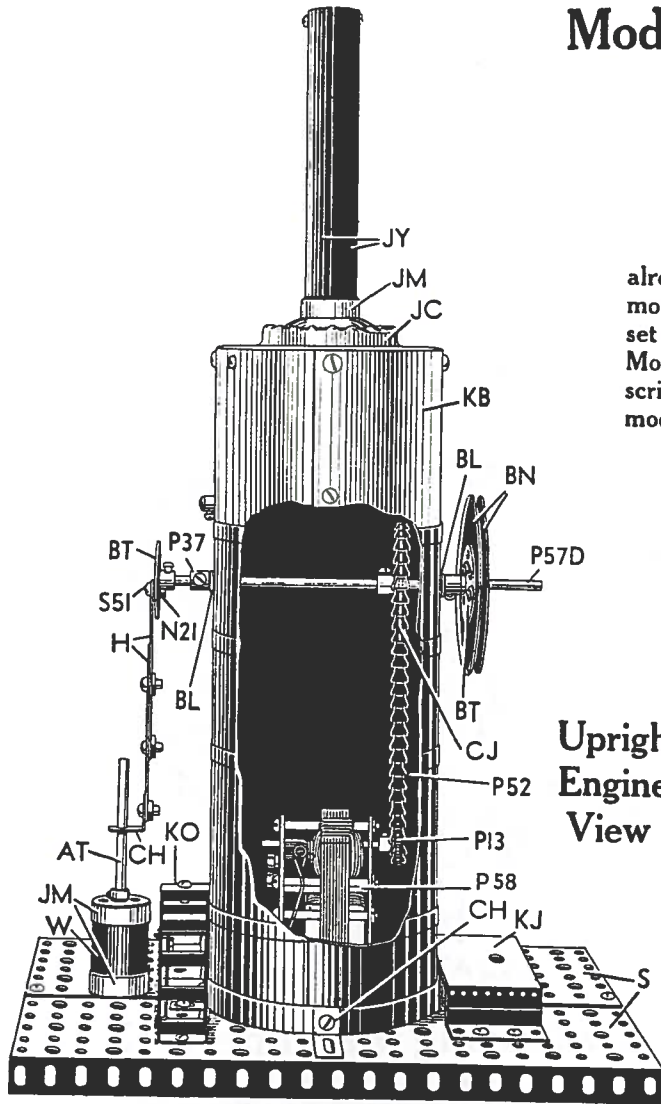
Tank Car – General View

Tank Car – Bottom View – Under Construction



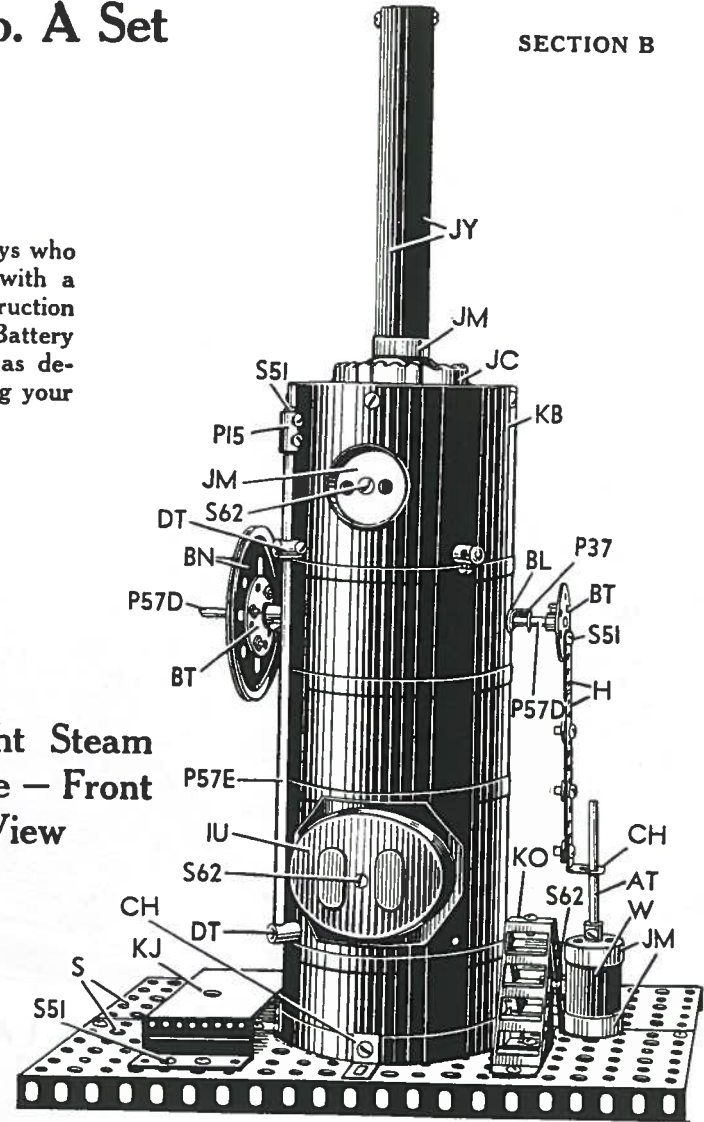
Models Built with No. A Set

The A set is primarily for Boys who already have a construction set with a motor. If you do not own a construction set you may secure either a P58 Battery Motor or a P56G 110 volt motor as described on parts sheet for operating your models.



Upright Steam Engine - Back View - Open

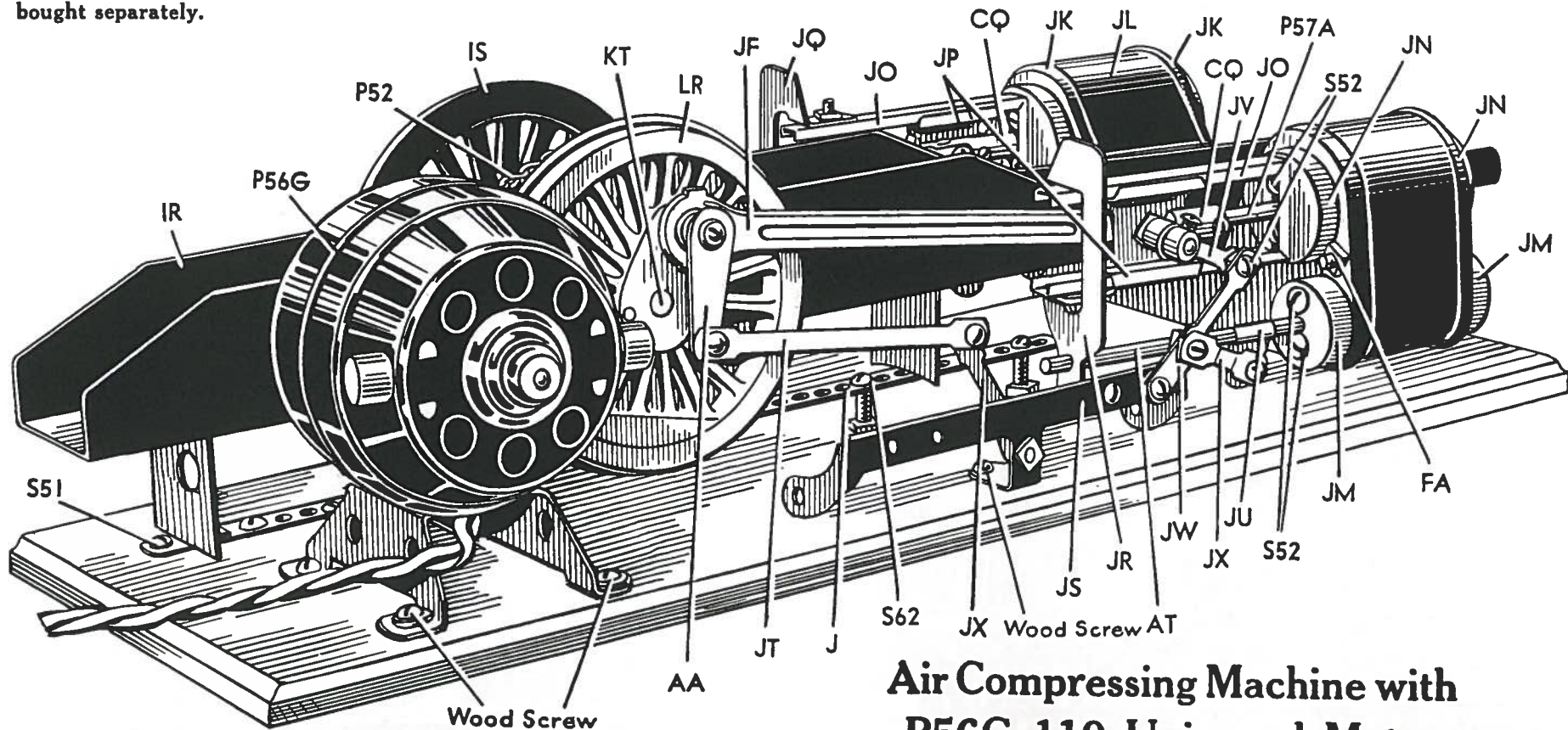
SECTION B



Upright Steam Engine - Front View

Models Built with No. A Set

P56G Motor not furnished in sets A, No. 8 and No. 8½. Can be bought separately.

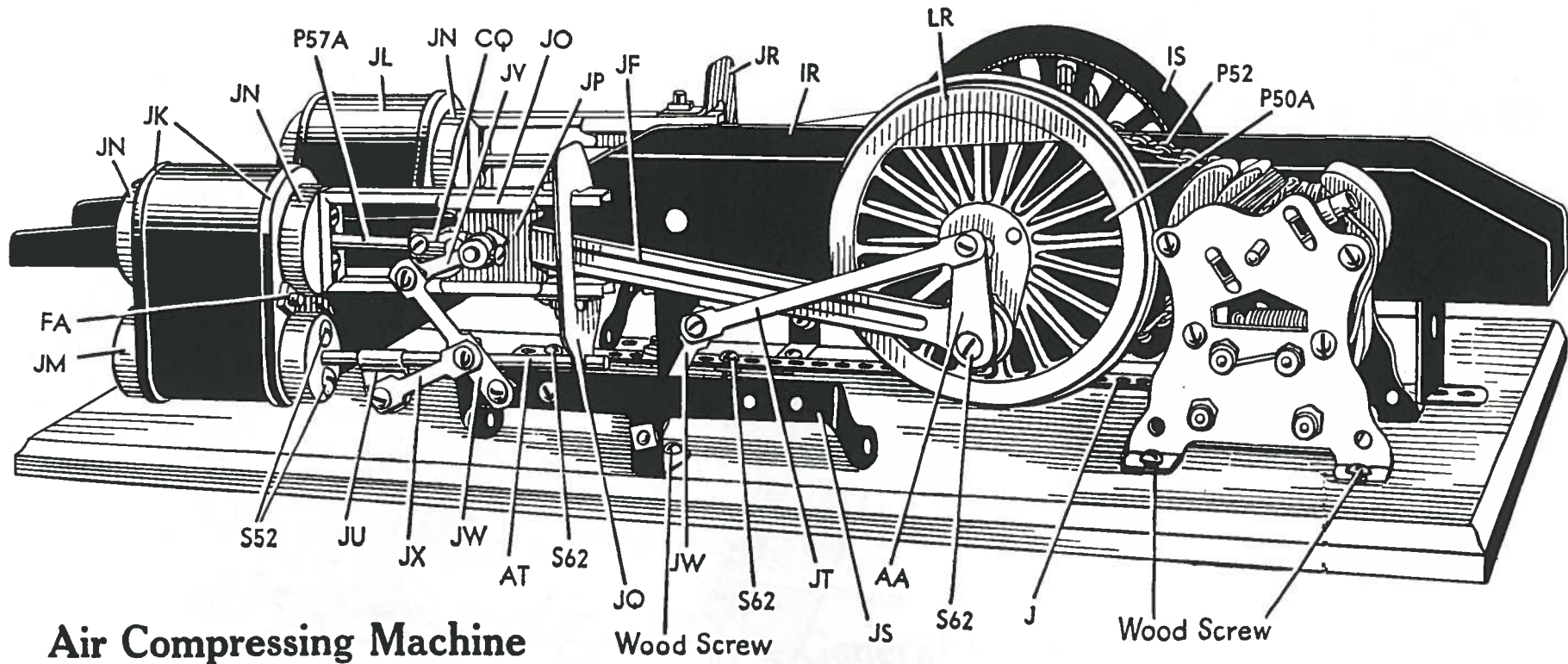


**Air Compressing Machine with
P56G 110 Universal Motor**

Models Built with No. A Set

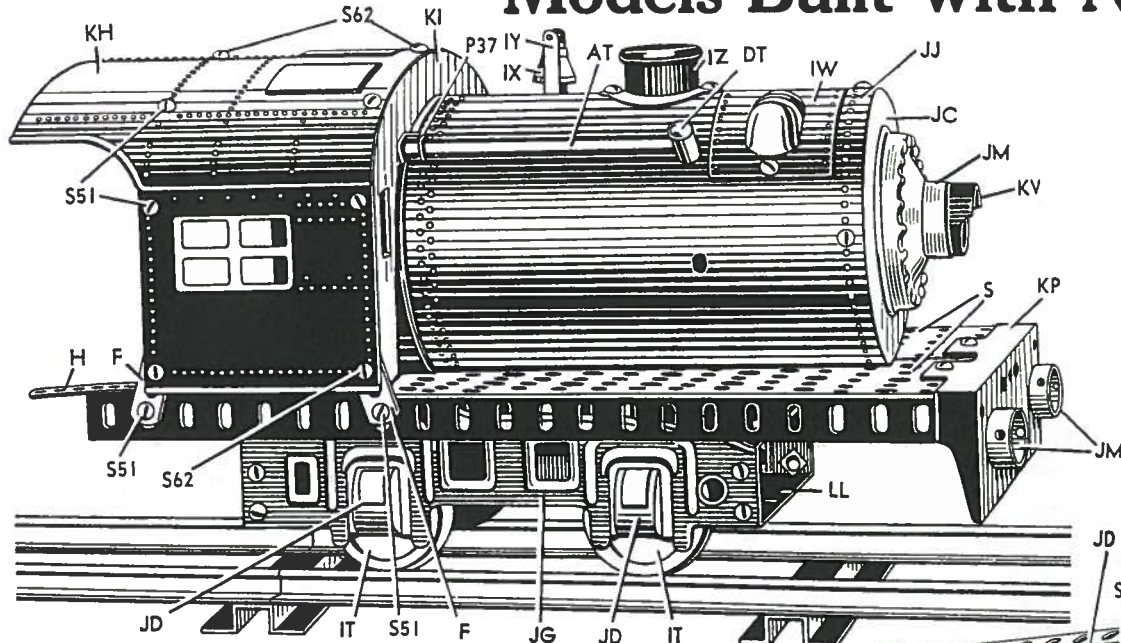
Air Compressing Machine with P58 Battery Motor

P58—8-24 Volt Motor not included in A set. Can be purchased separately. See note.



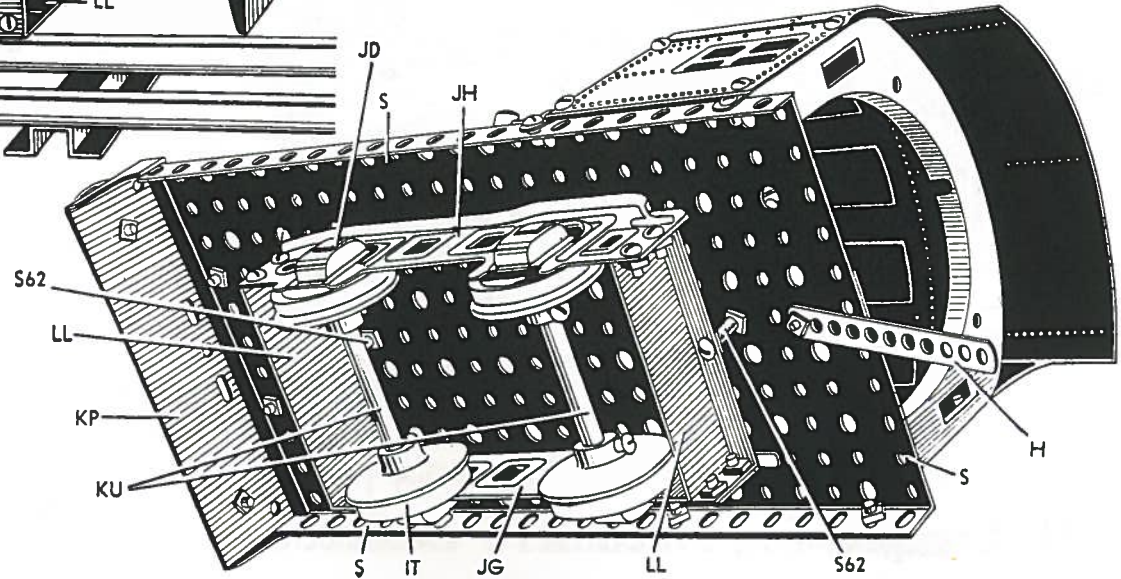
Air Compressing Machine

Models Built with No. A Set



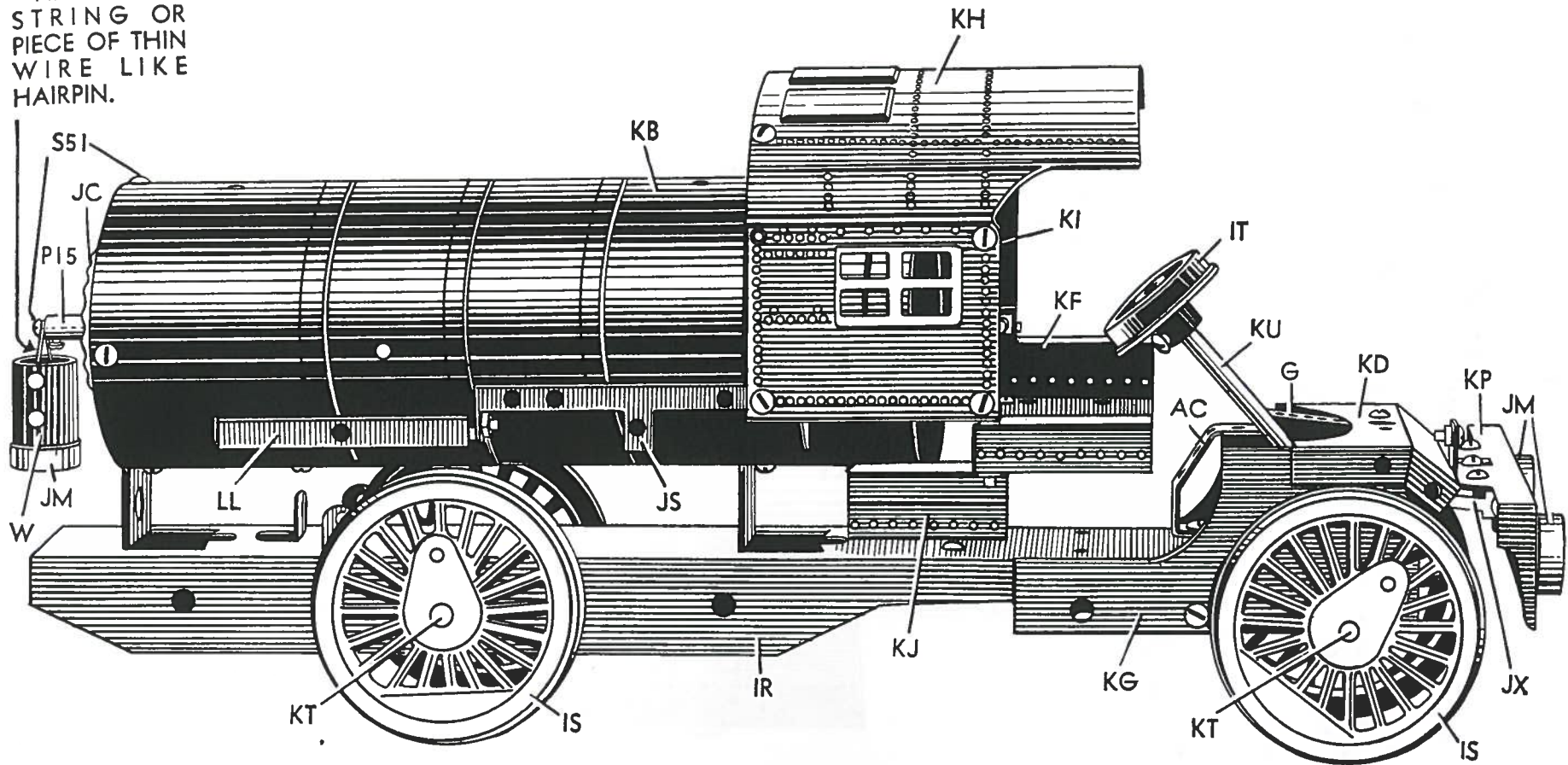
Industrial Locomotive —
Bottom View

Industrial Locomotive



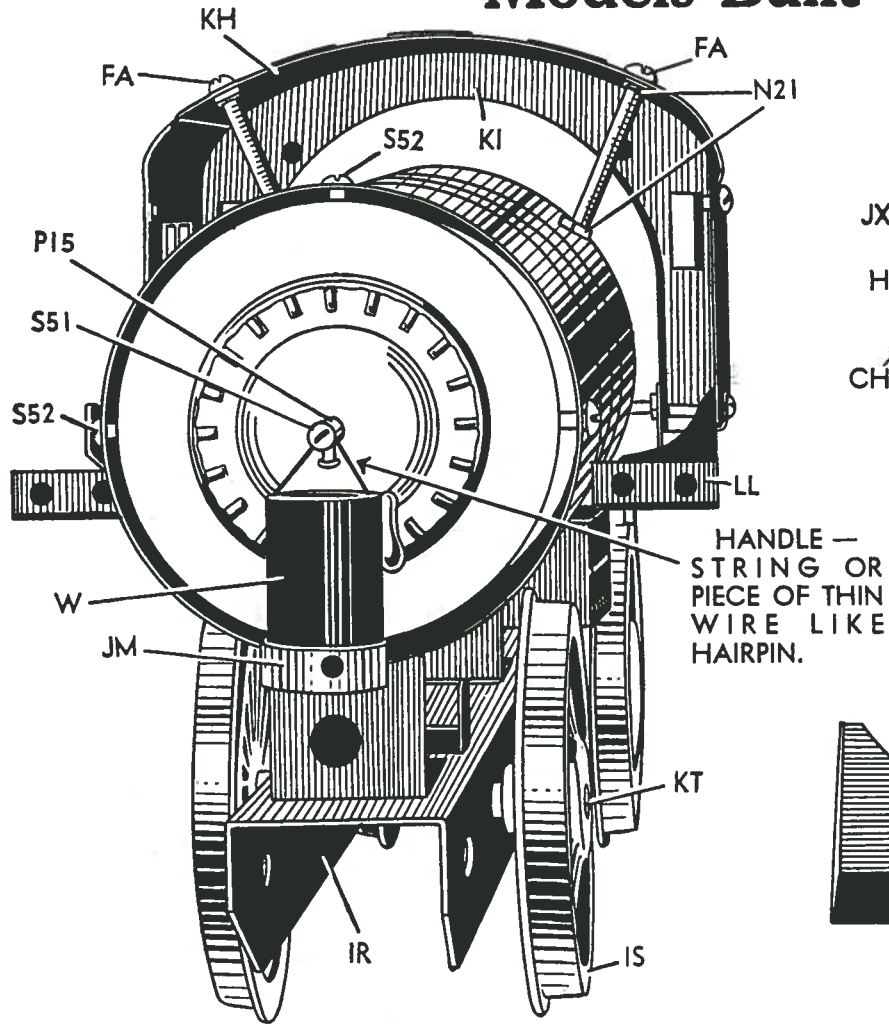
Models Built with No. A Set

HANDLE —
STRING OR
PIECE OF THIN
WIRE LIKE
HAIRPIN.

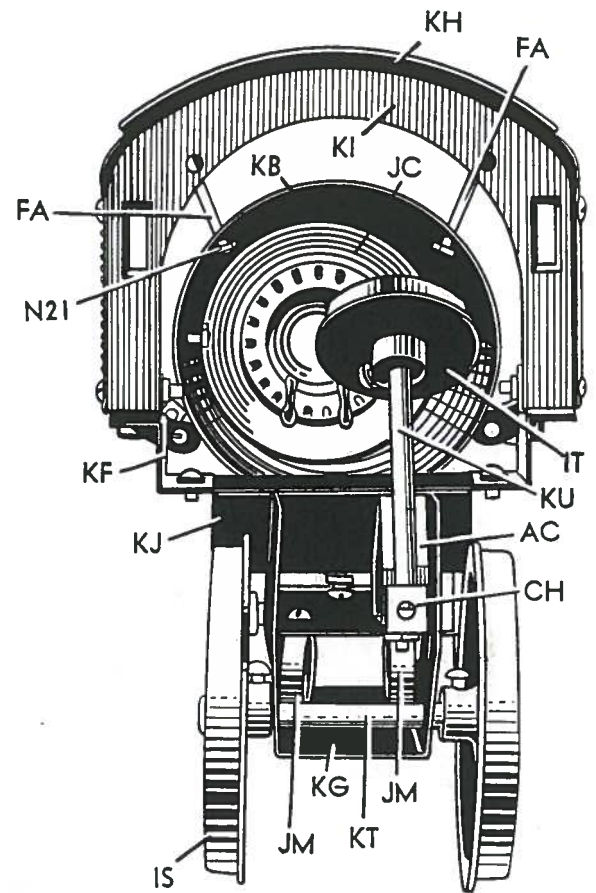
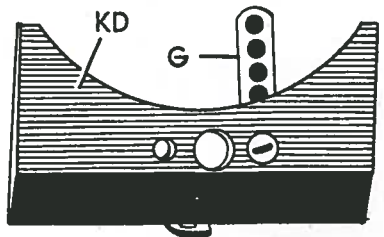
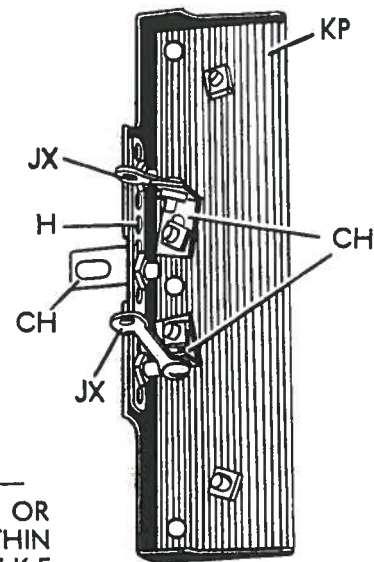


Oil Truck -- General View

Models Built with No. A Set



HANDLE —
 STRING OR
 PIECE OF THIN
 WIRE LIKE
 HAIRPIN.

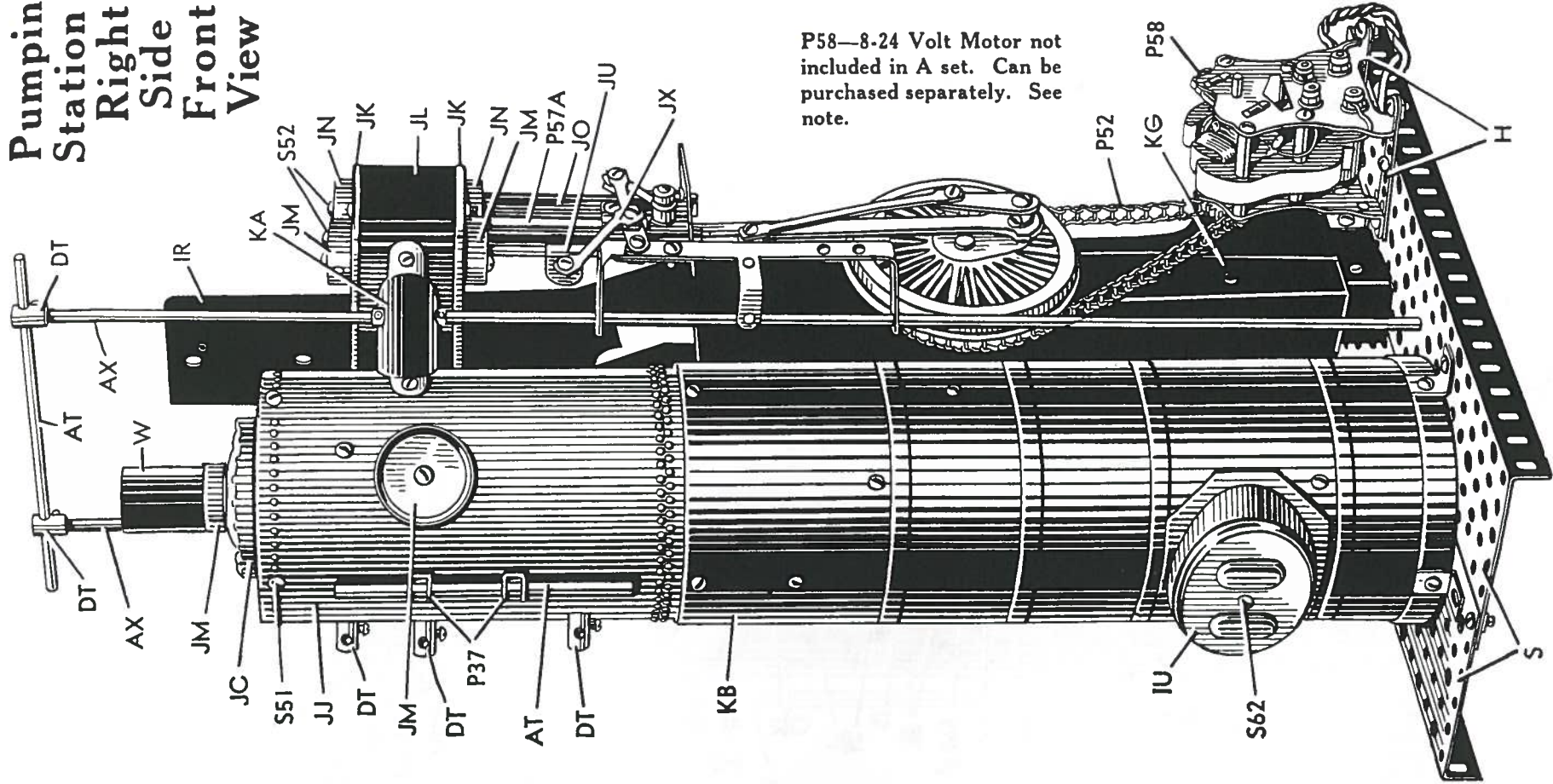


Oil Truck -- Detail Rear End Construction

Oil Truck -- Detail Front End Construction

Models Built with No. A Set

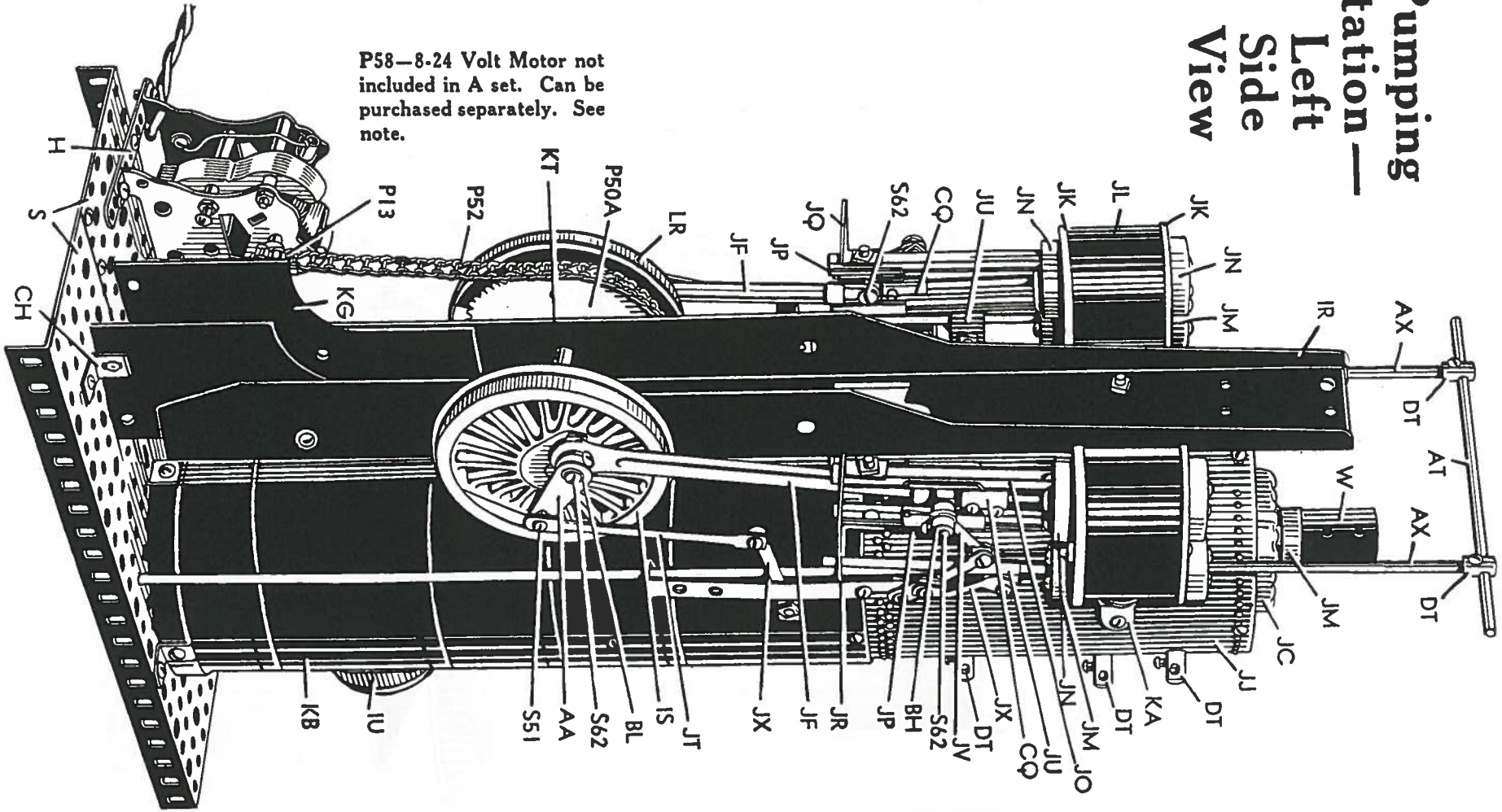
Pumping
Station --
Right
Side
Front
View



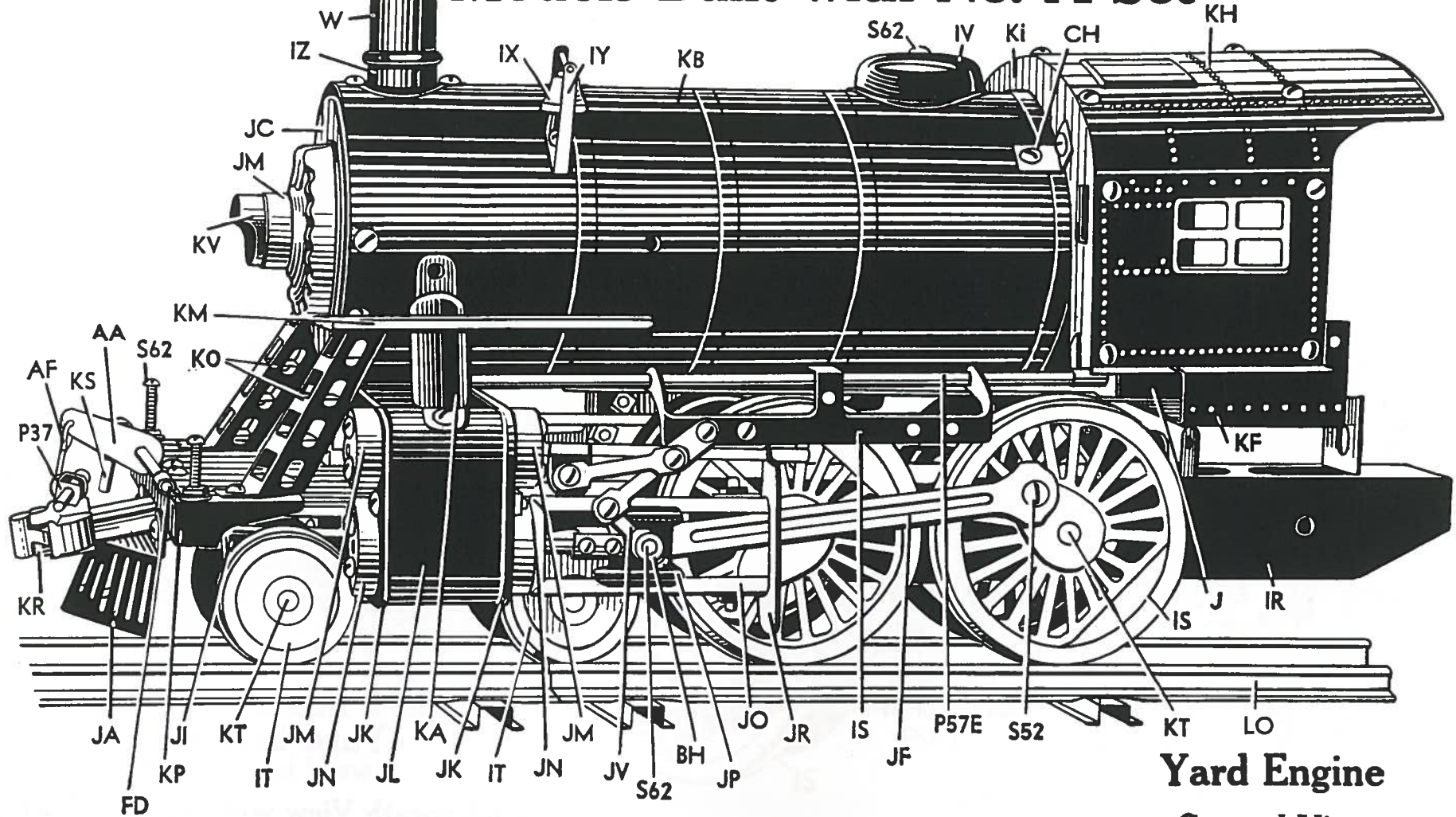
Models Built with No. A Set

Pumping Station — Left Side View

P58—8.24 Volt Motor not included in A set. Can be purchased separately. See note.

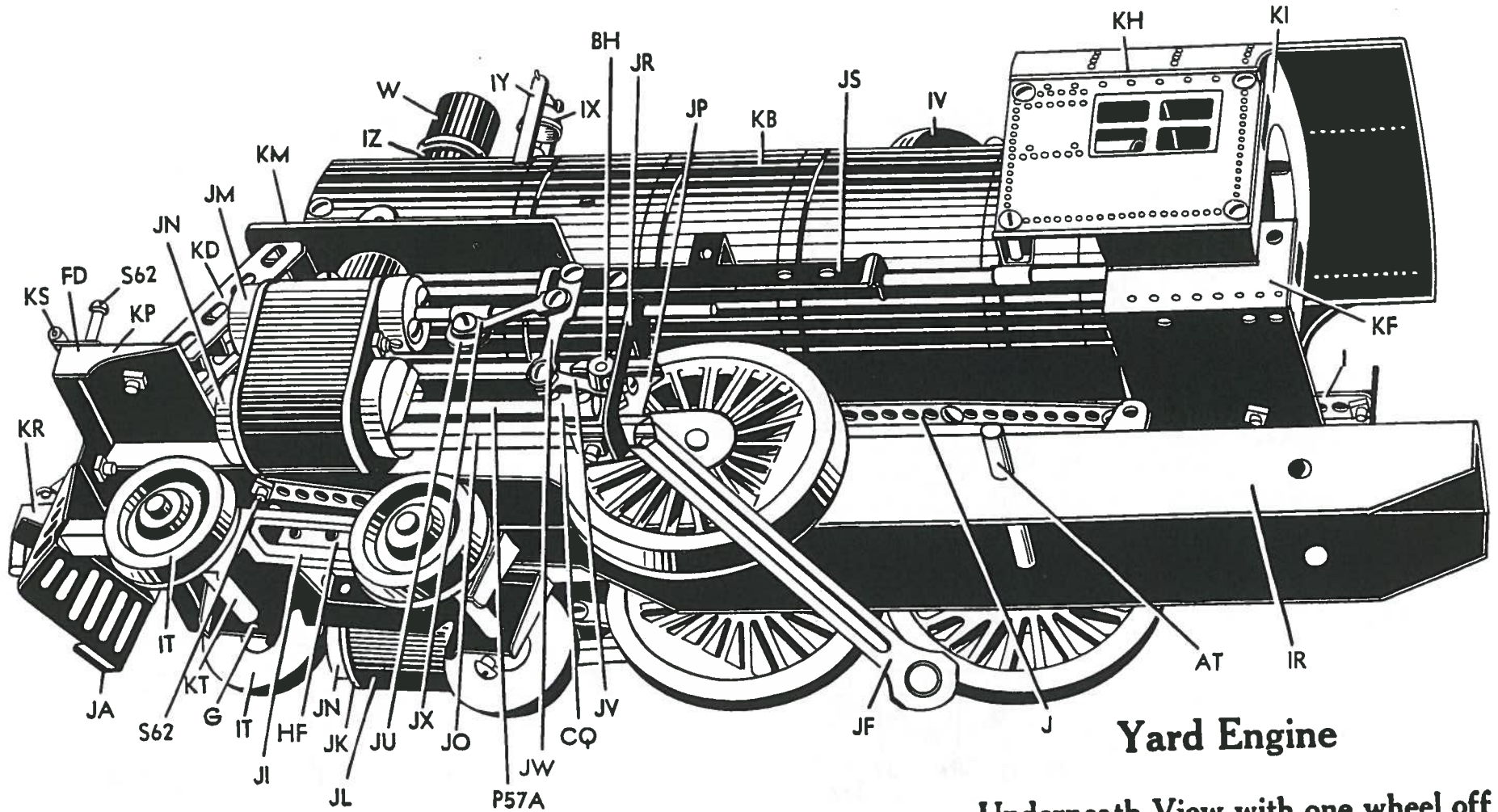


Models Built with No. A Set



Yard Engine
General View

Models Built with No. A Set

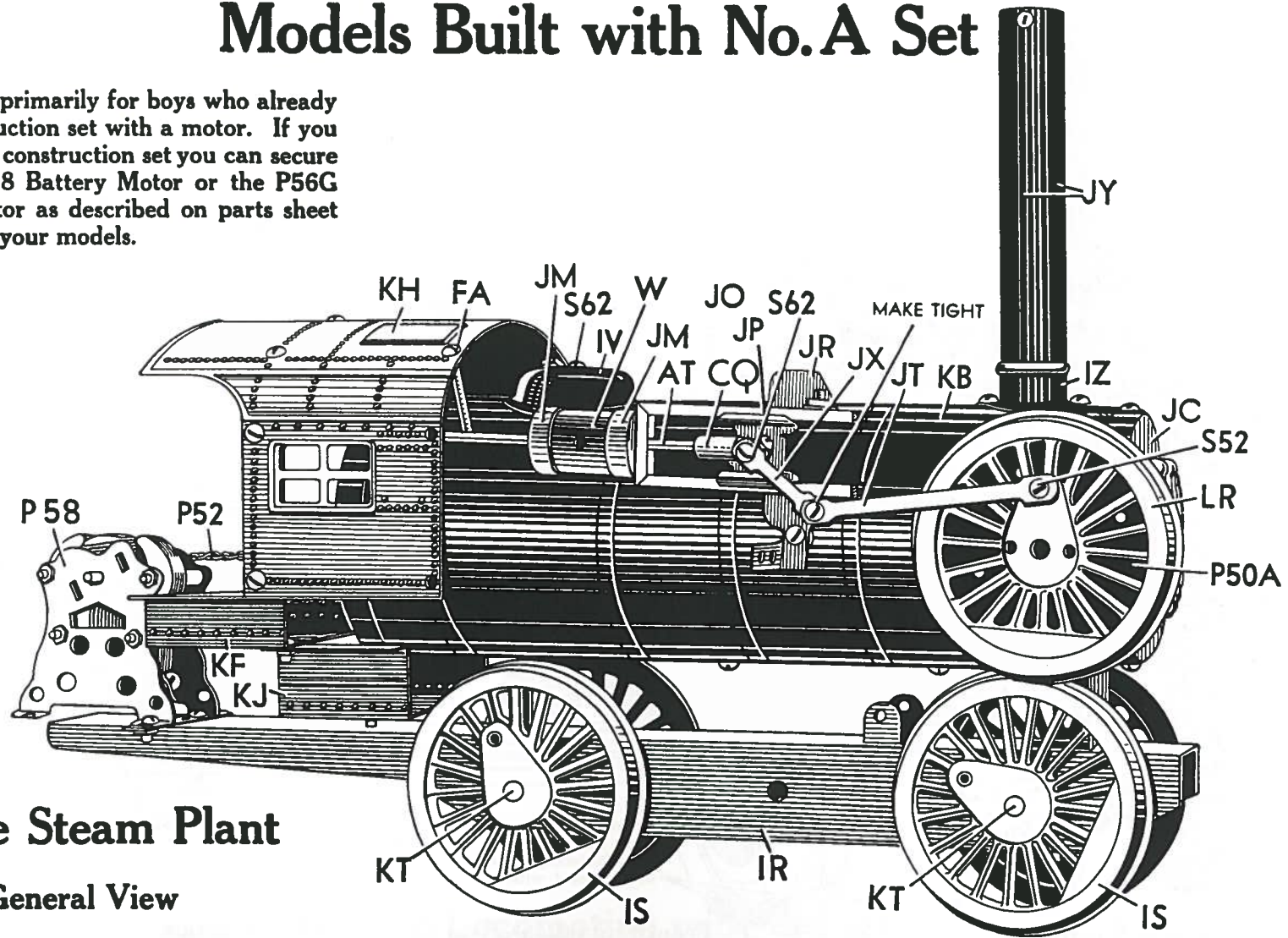


Yard Engine

Underneath View with one wheel off

Models Built with No.A Set

The A set is primarily for boys who already have a construction set with a motor. If you do not have a construction set you can secure either the P58 Battery Motor or the P56G 110 Volt Motor as described on parts sheet for operating your models.

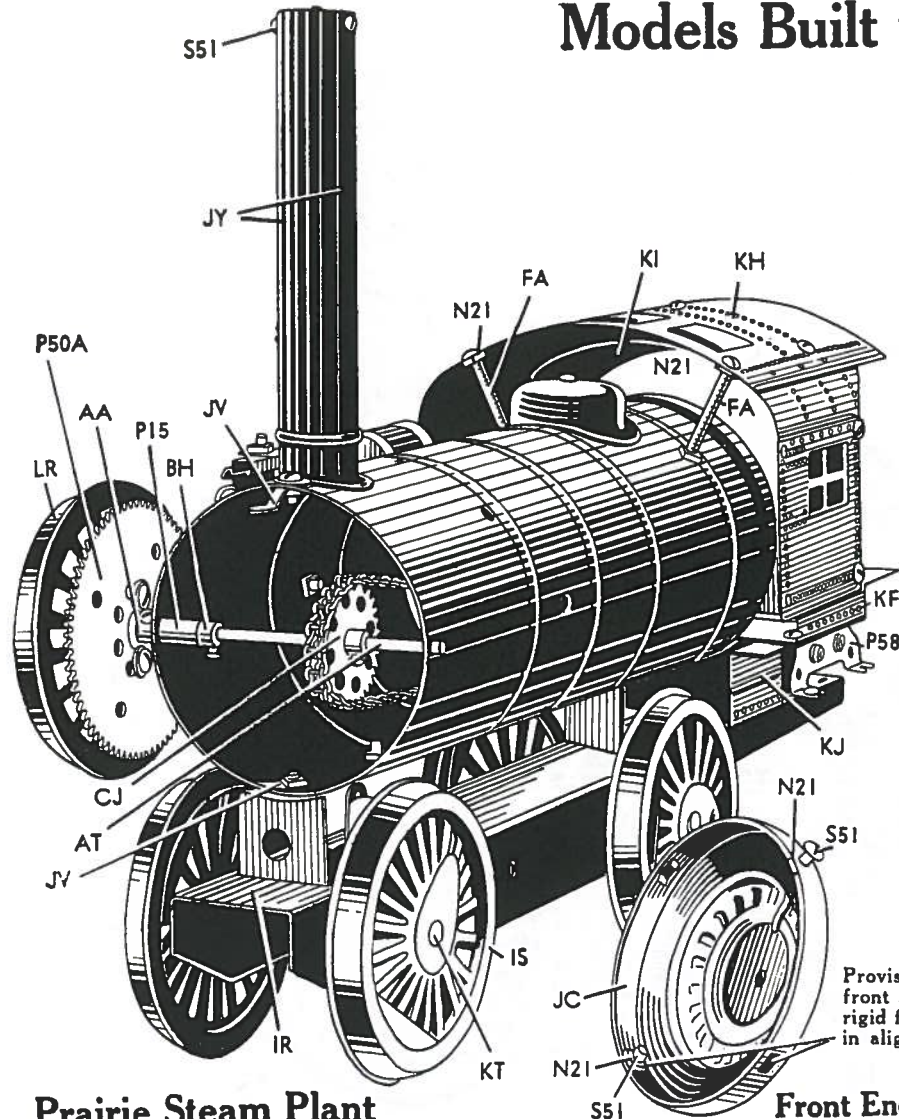


Prairie Steam Plant

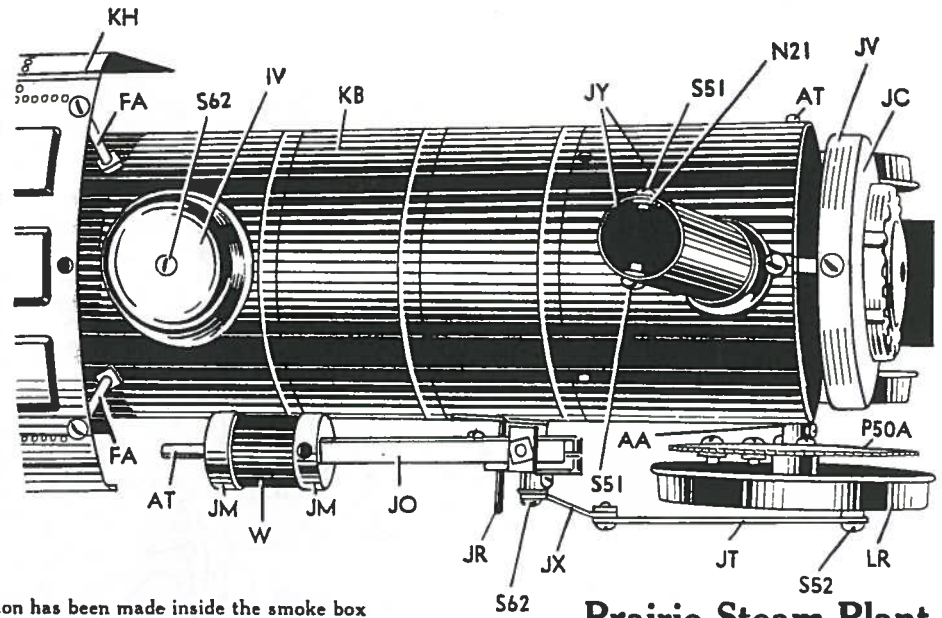
General View

Models Built with No. A Set

The A set is primarily for boys who already have a construction set with a motor. If you do not have a construction set you can secure either the P58 Battery Motor or the P56G 110 Volt Motor as described on parts sheet for operating your models.



Prairie Steam Plant

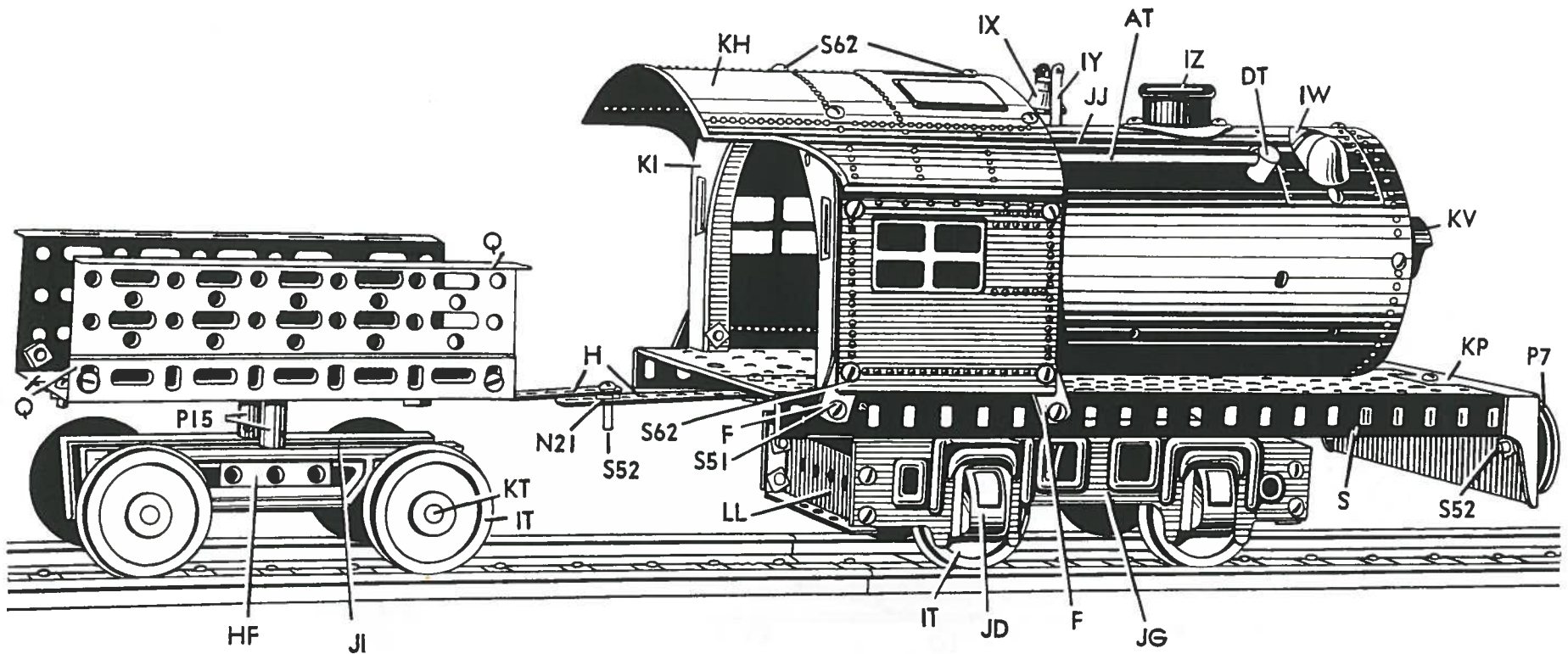


**Prairie Steam Plant
Top View**

Provision has been made inside the smoke box front JC to hold N21 nut in place. To insure rigid fastening press little prongs to hold nut in alignment with hole.

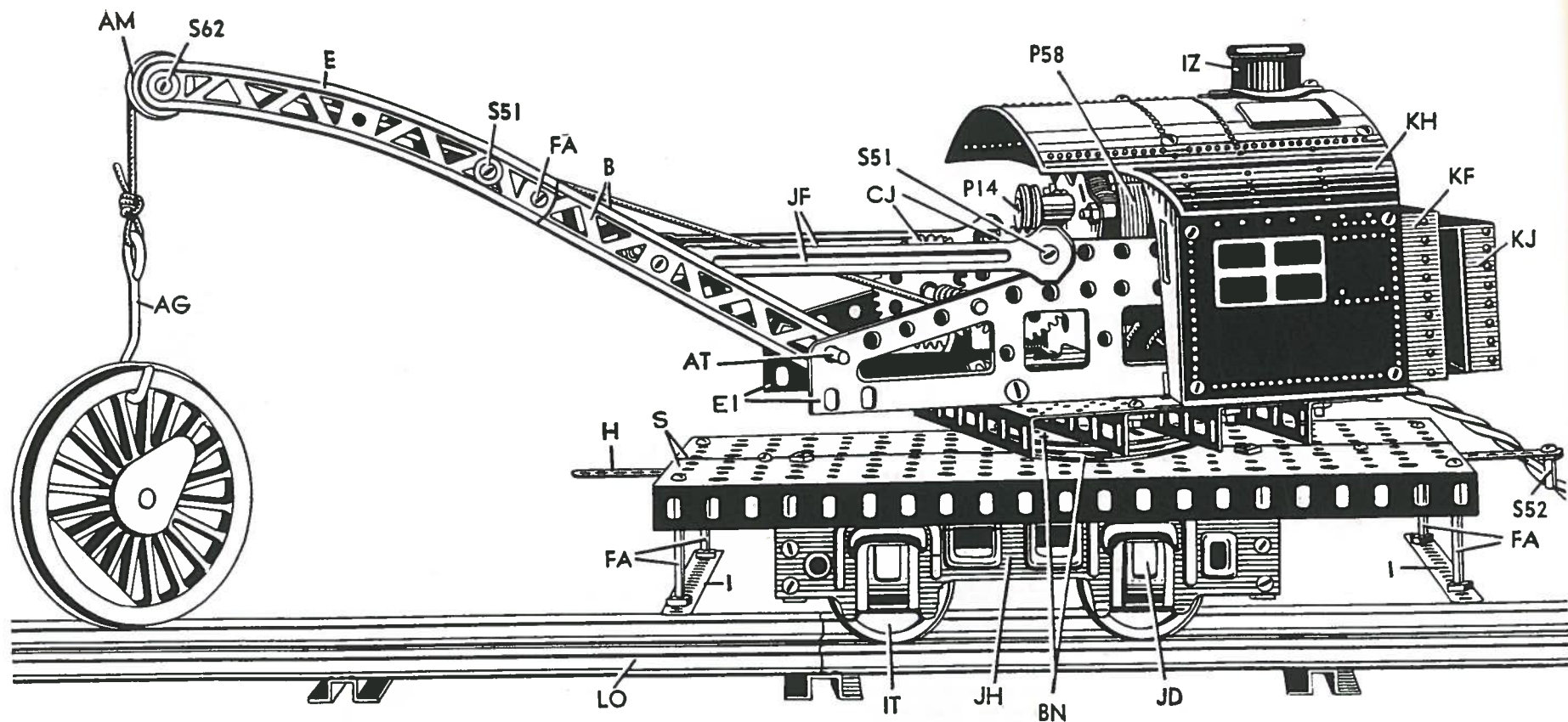
Front End taken off to show Gear Construction

Models Built with No. 8 Set



Industrial Locomotive with Trailer

Models Built with No. 8 Set

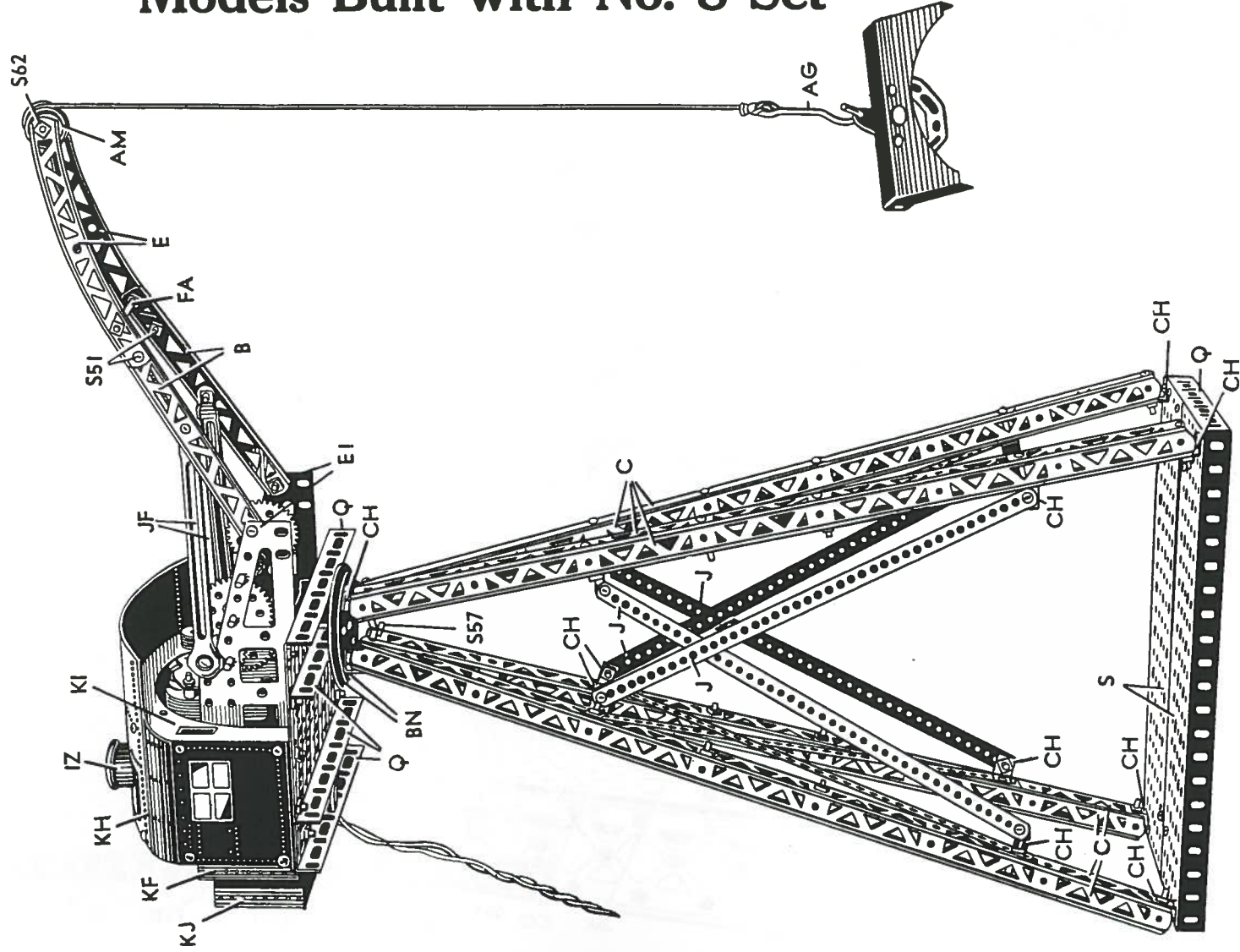


Wrecking Derrick

Electric Revolving Crane

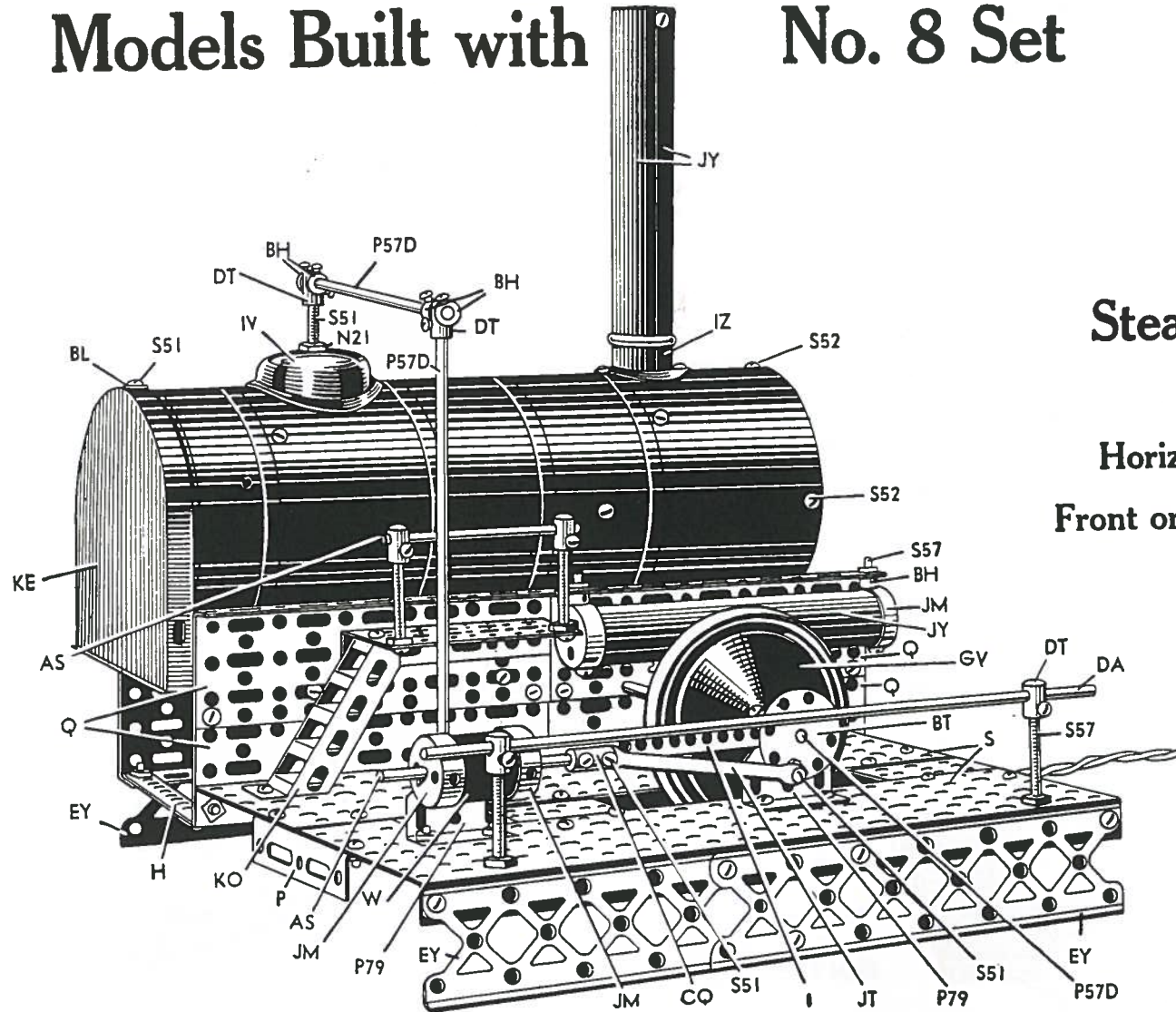
Models Built with No. 8 Set

General View



Models Built with

No. 8 Set

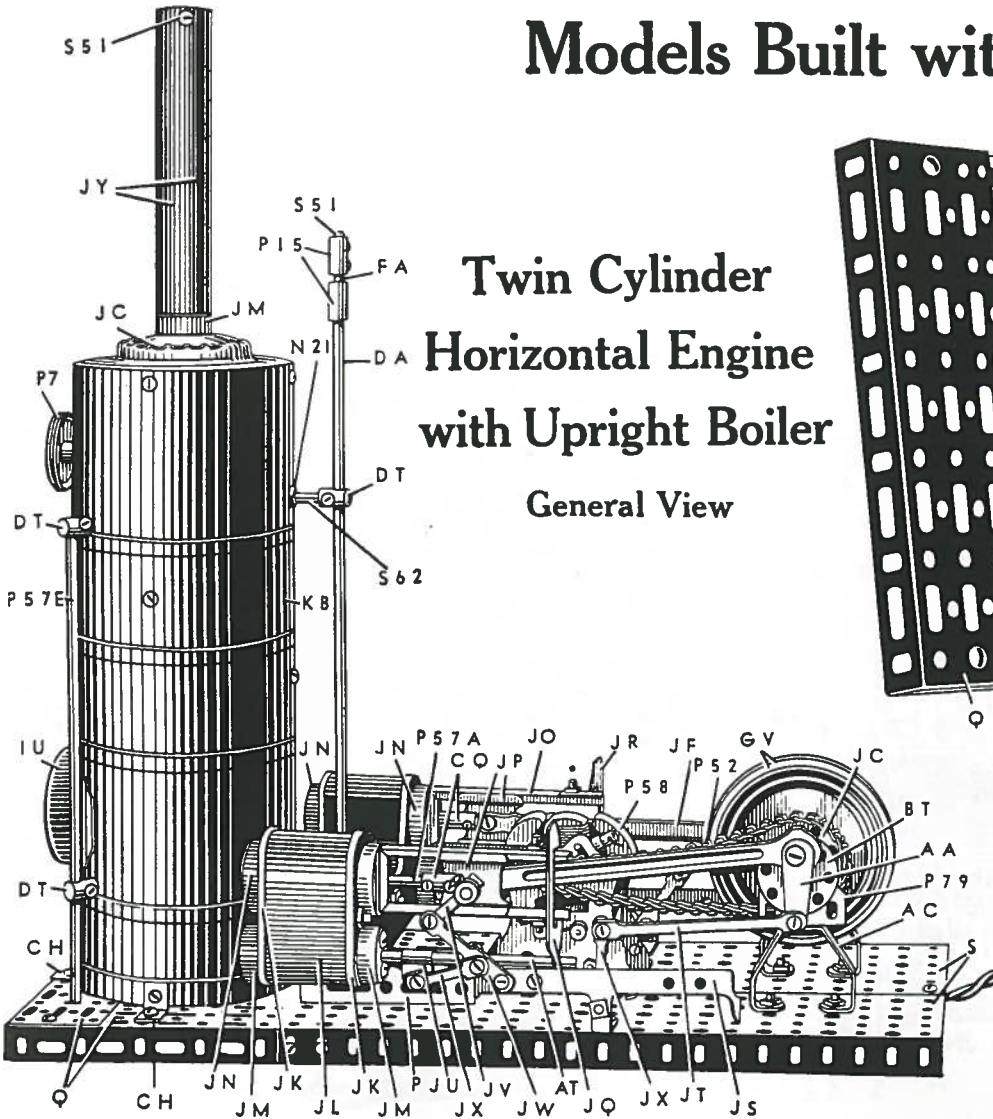


Steam Plant

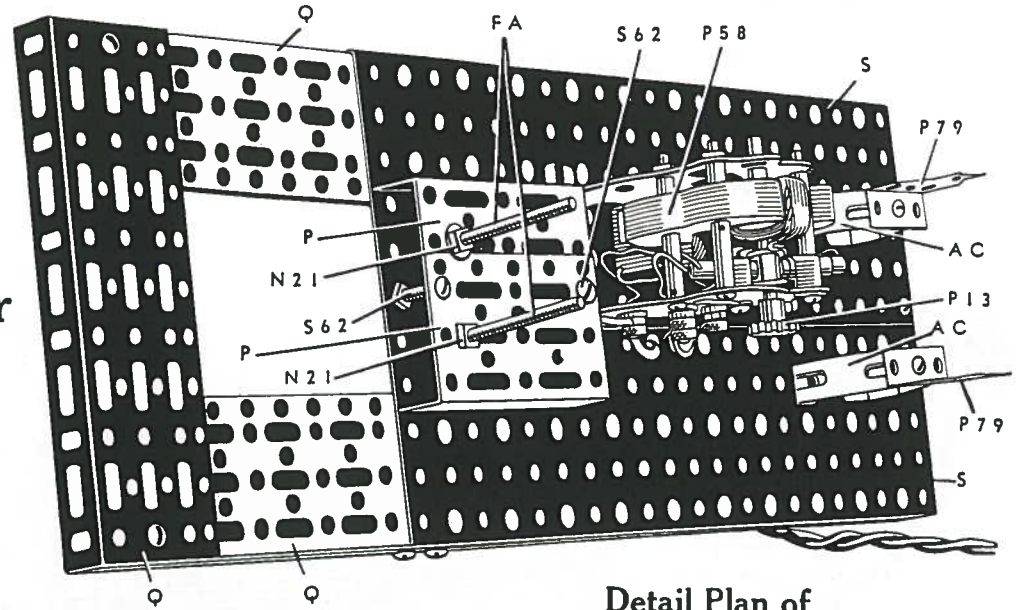
Horizontal Engine
Front or General View

Models Built with No. 8 Set

Sec. C



**Twin Cylinder
Horizontal Engine
with Upright Boiler**
General View

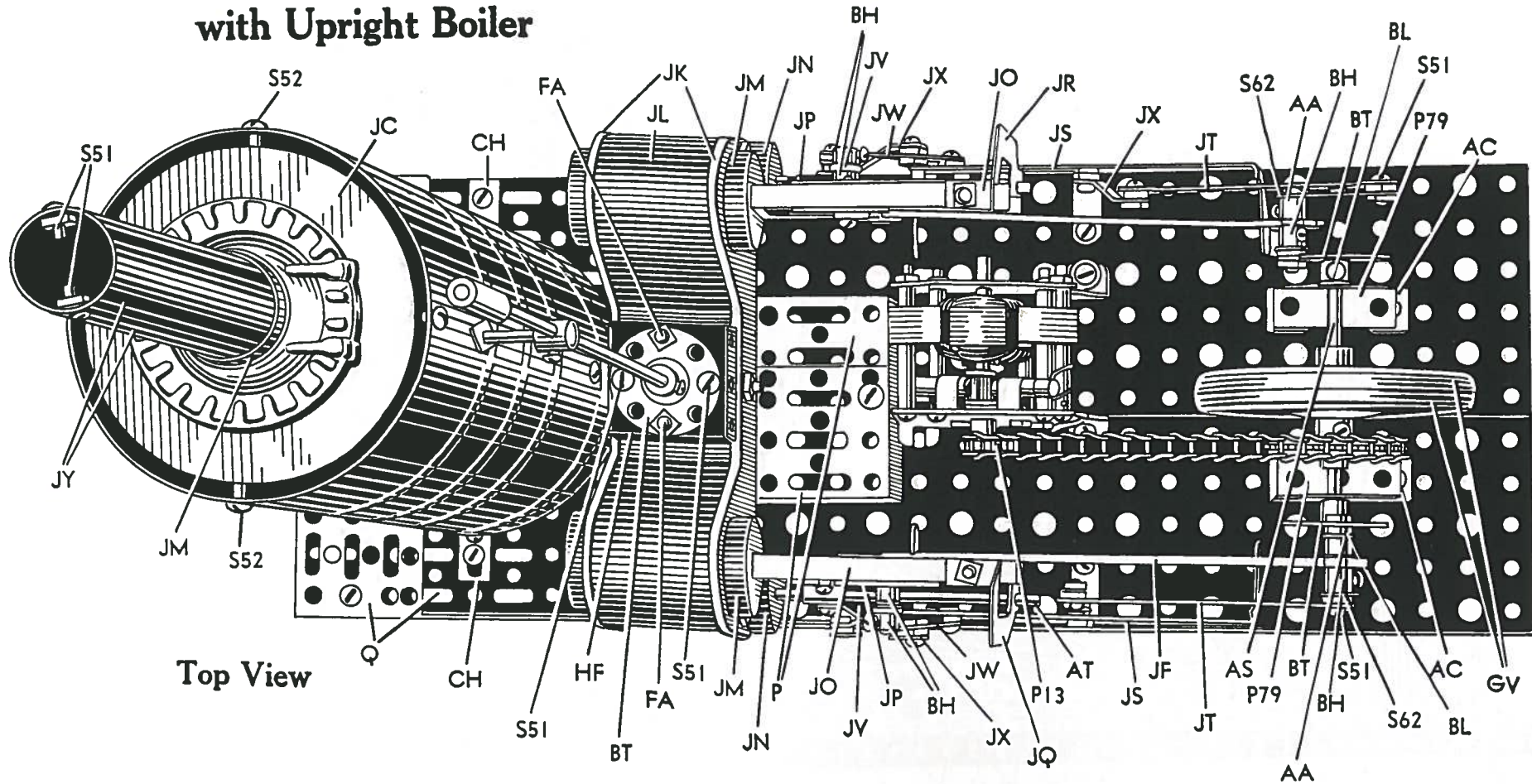


Detail Plan of
Base Construction

**Twin Cylinder Horizontal
Engine with Upright Boiler**

Models Built with No. 8 Set

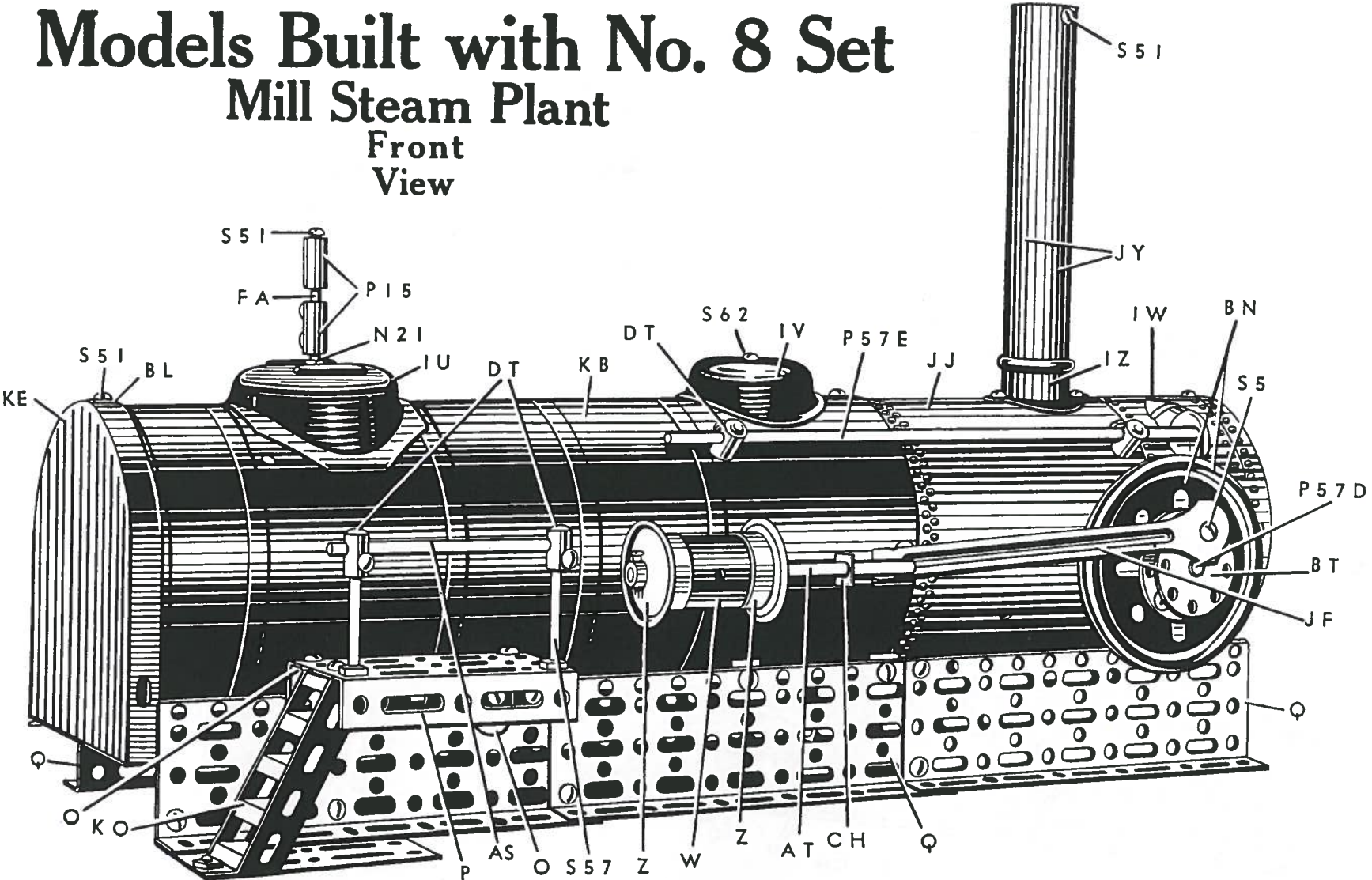
Twin Cylinder Horizontal Engine with Upright Boiler



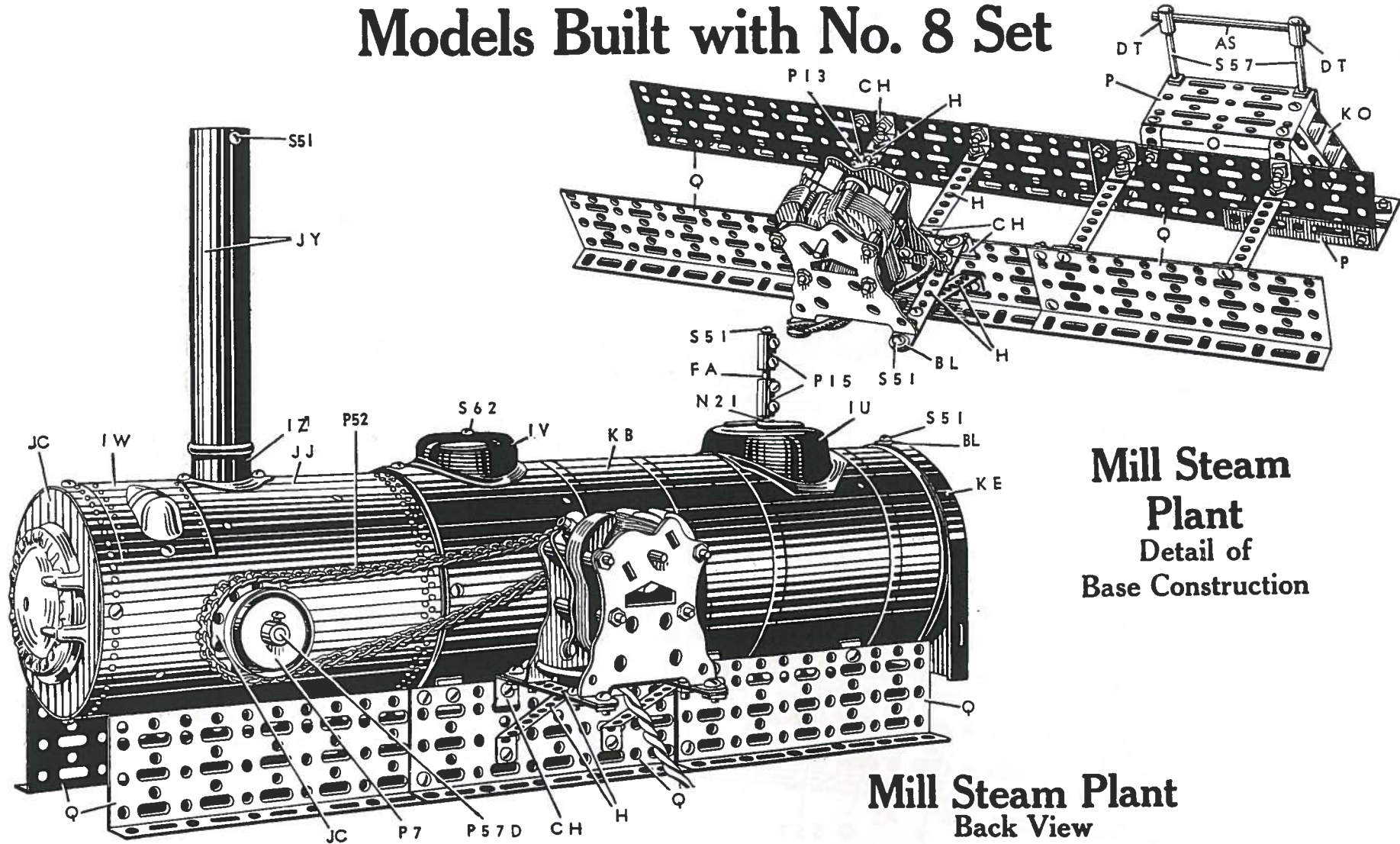
Models Built with No. 8 Set

Mill Steam Plant

Front View



Models Built with No. 8 Set



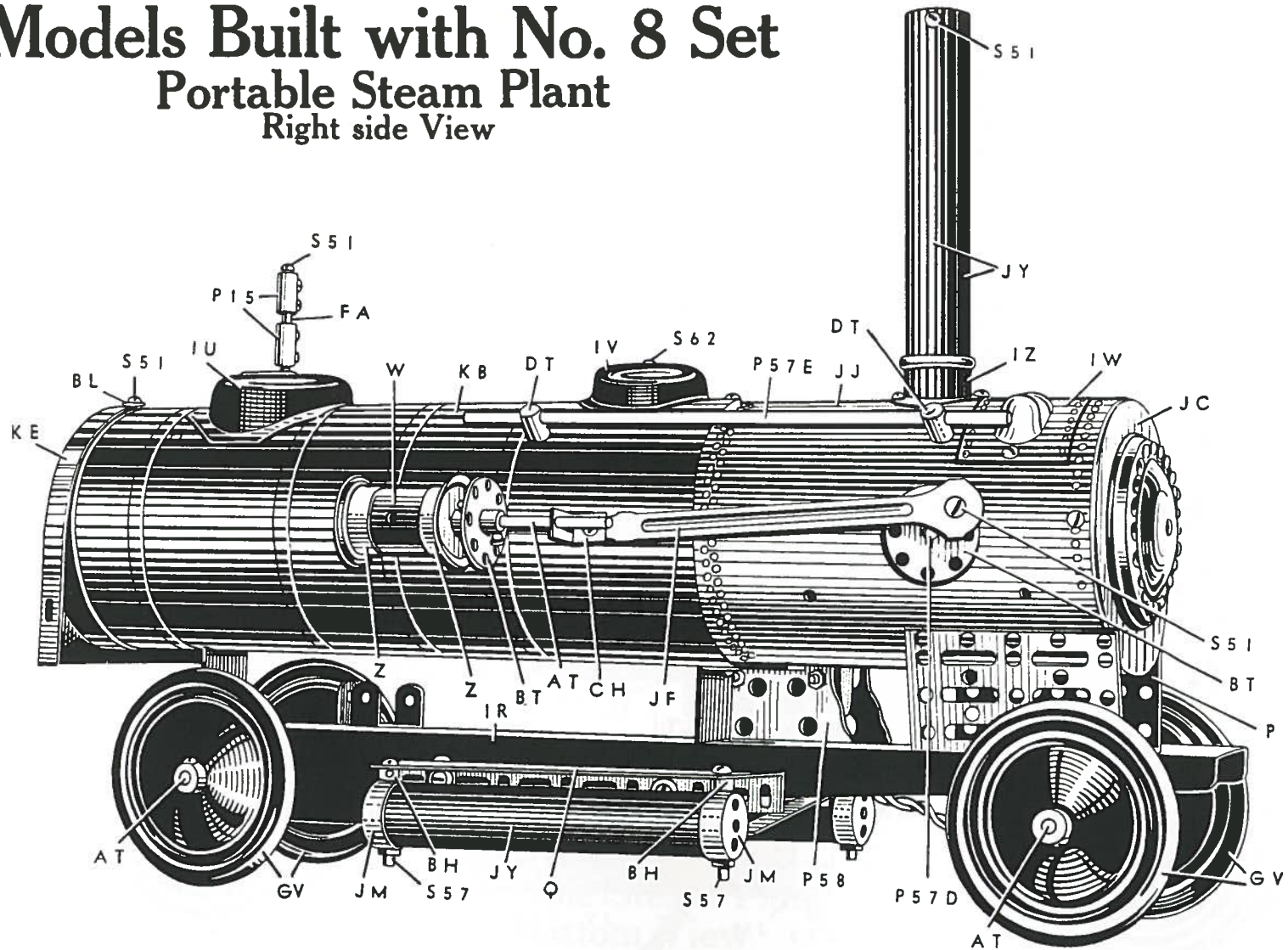
**Mill Steam
Plant
Detail of
Base Construction**

**Mill Steam Plant
Back View**

Models Built with No. 8 Set

Portable Steam Plant

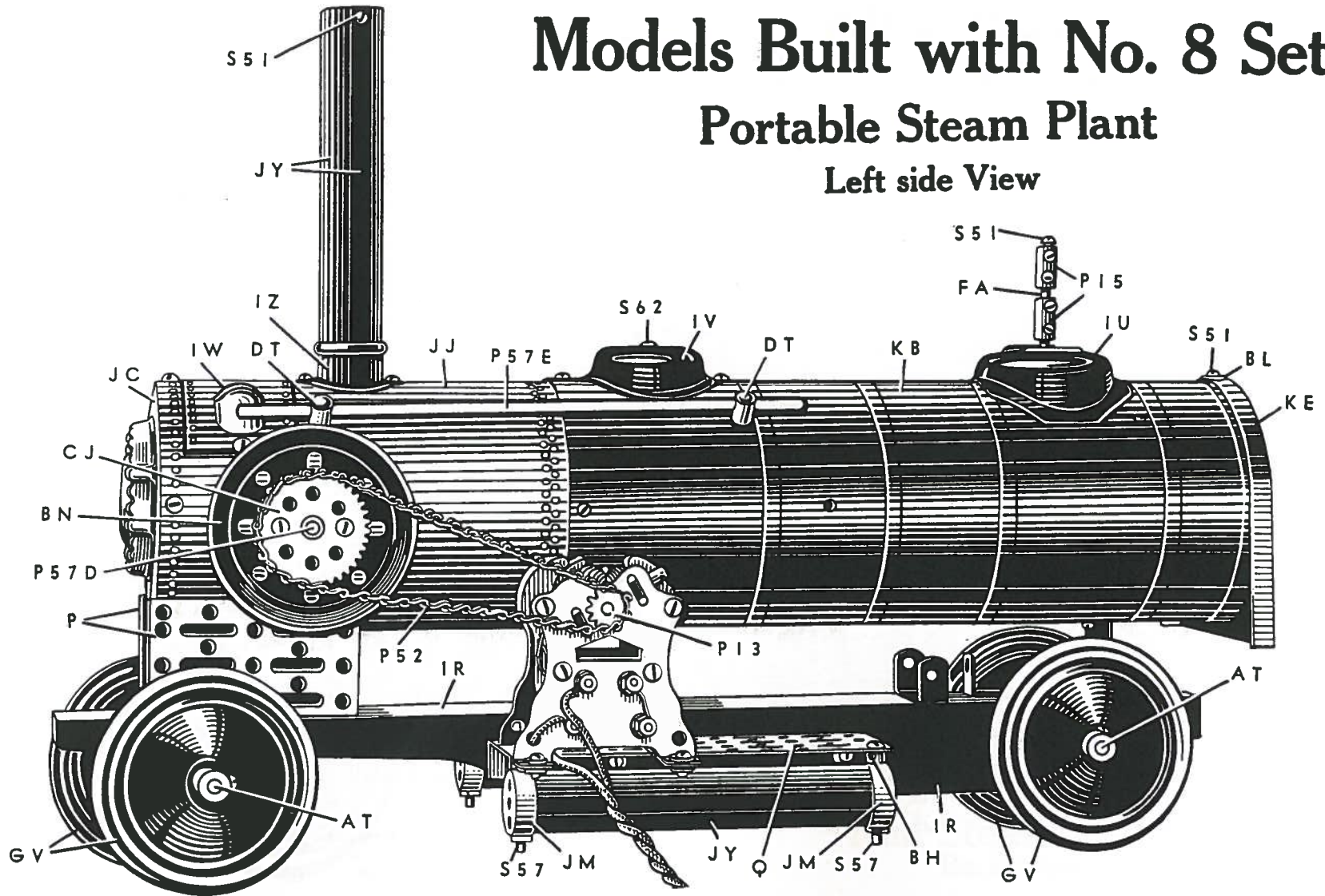
Right side View



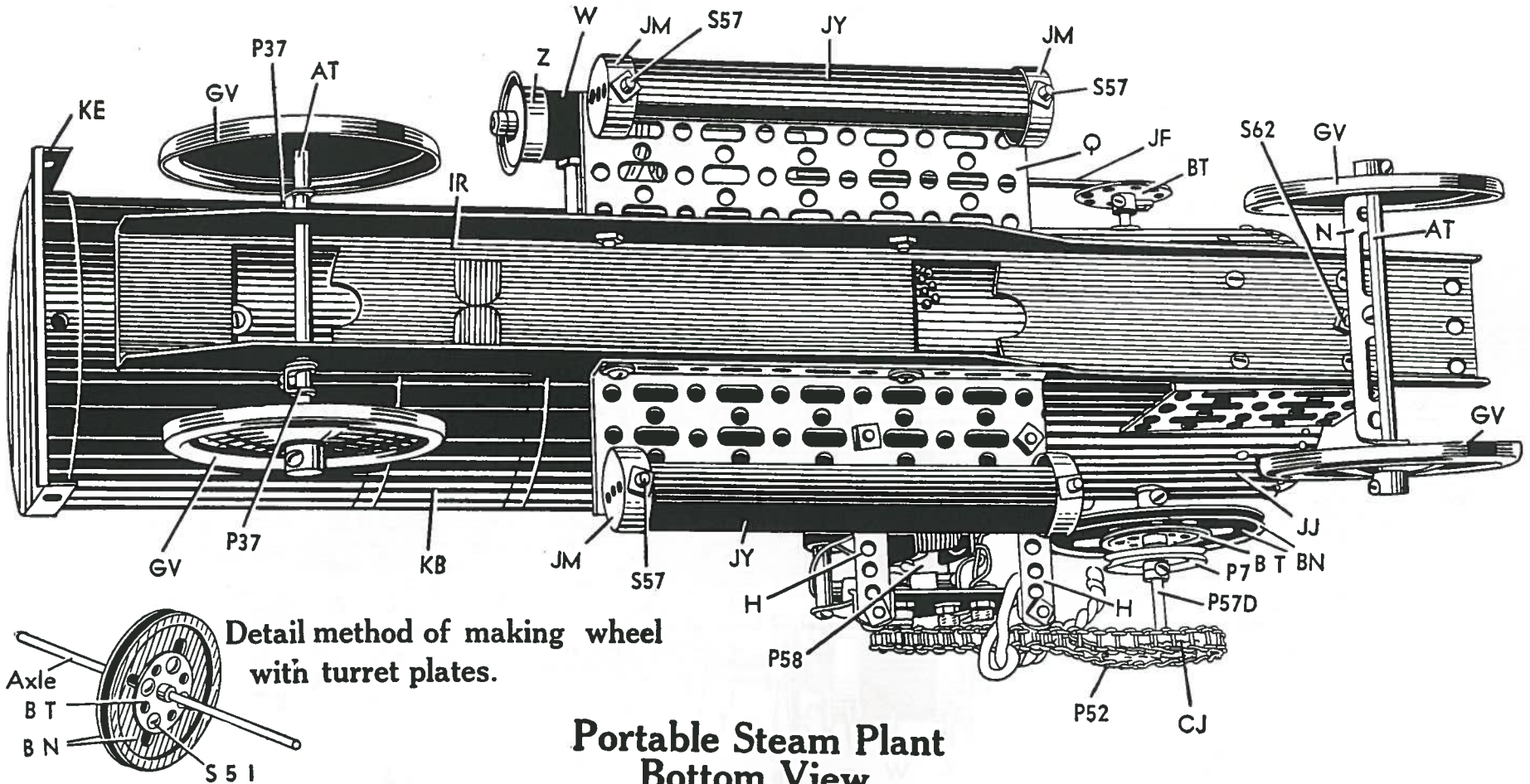
Models Built with No. 8 Set

Portable Steam Plant

Left side View



Models Built with No. 8 Set

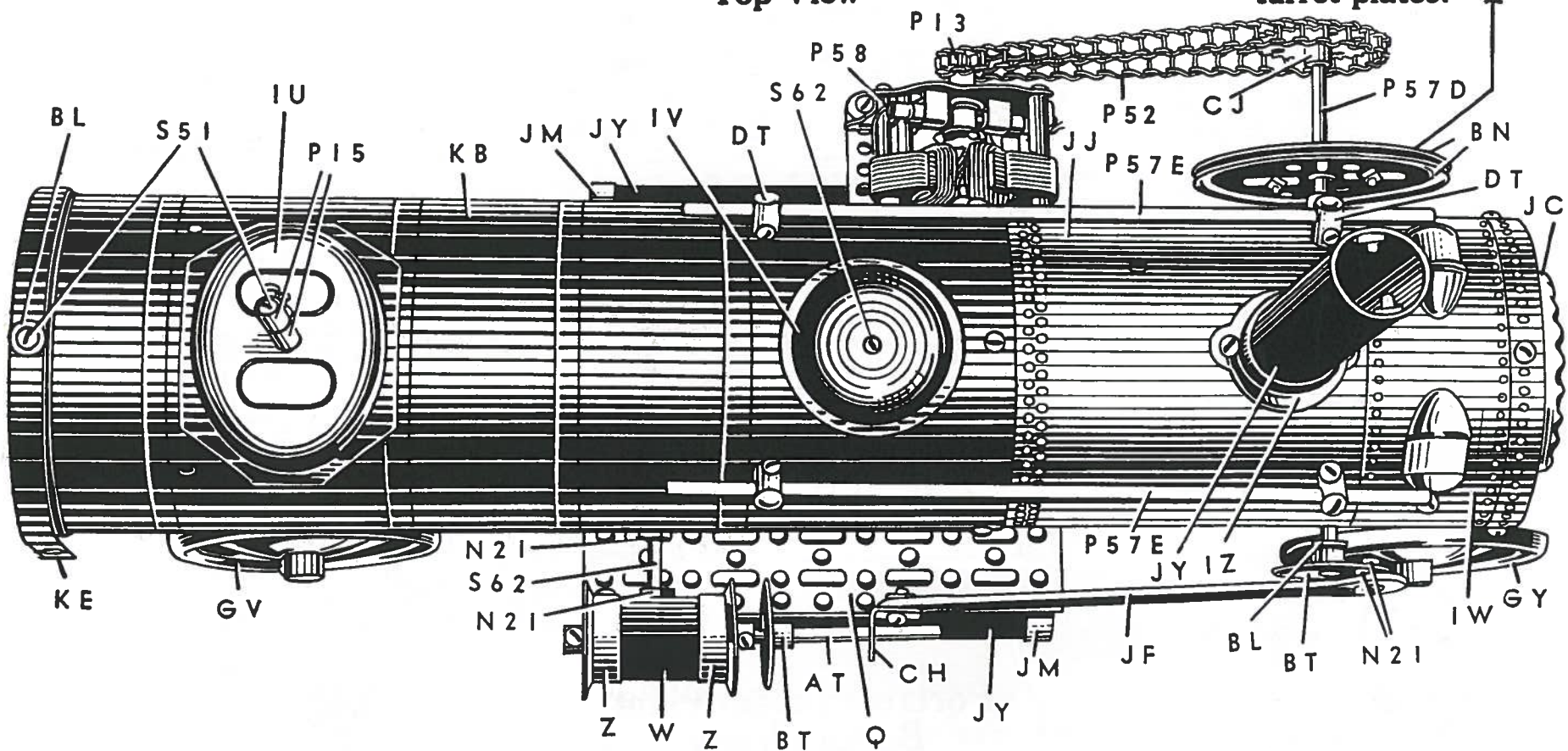


Models Built with No. 8 Set

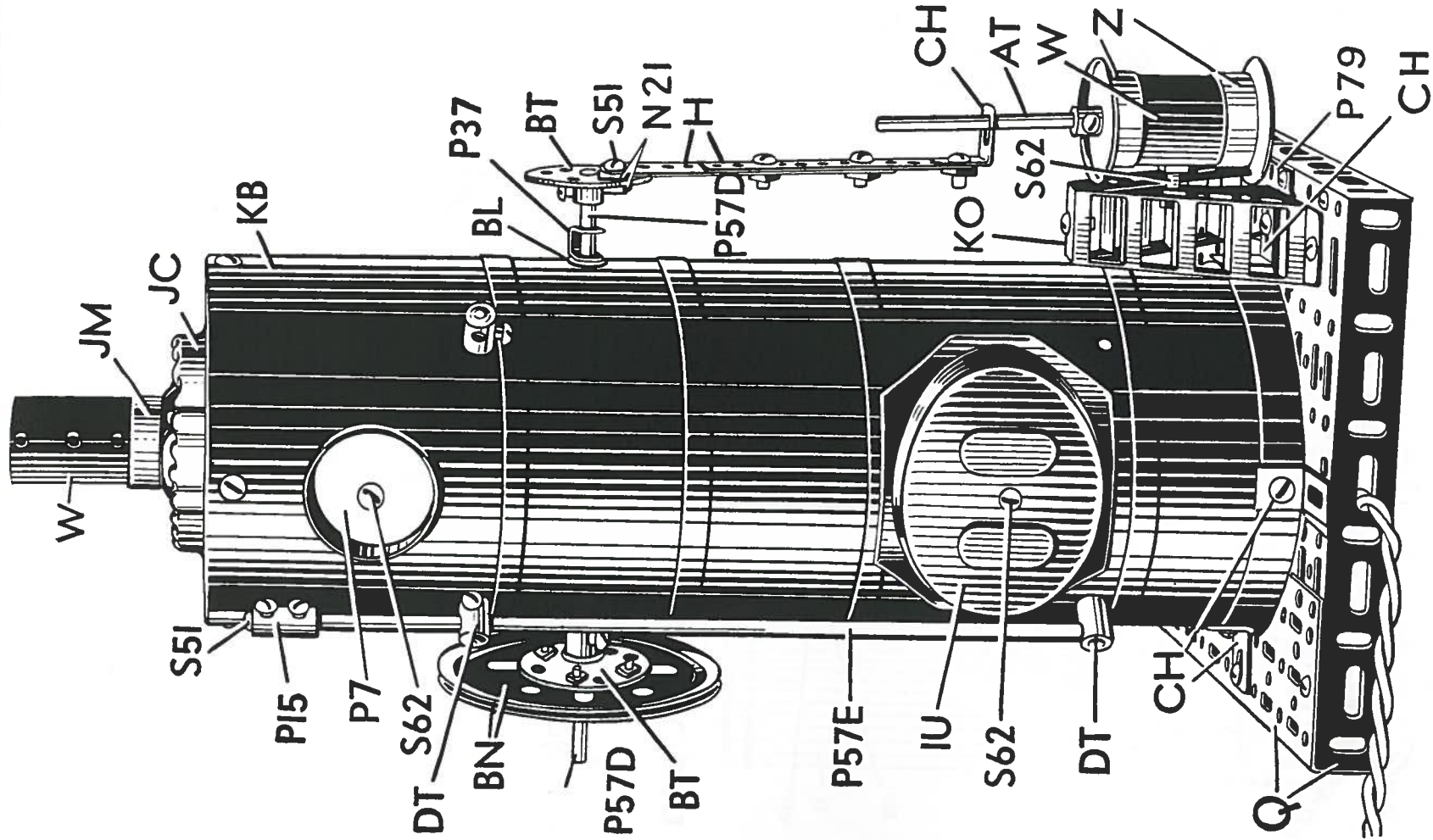
Portable Steam Plant

Top View

See detail method of making wheel with turret plates.



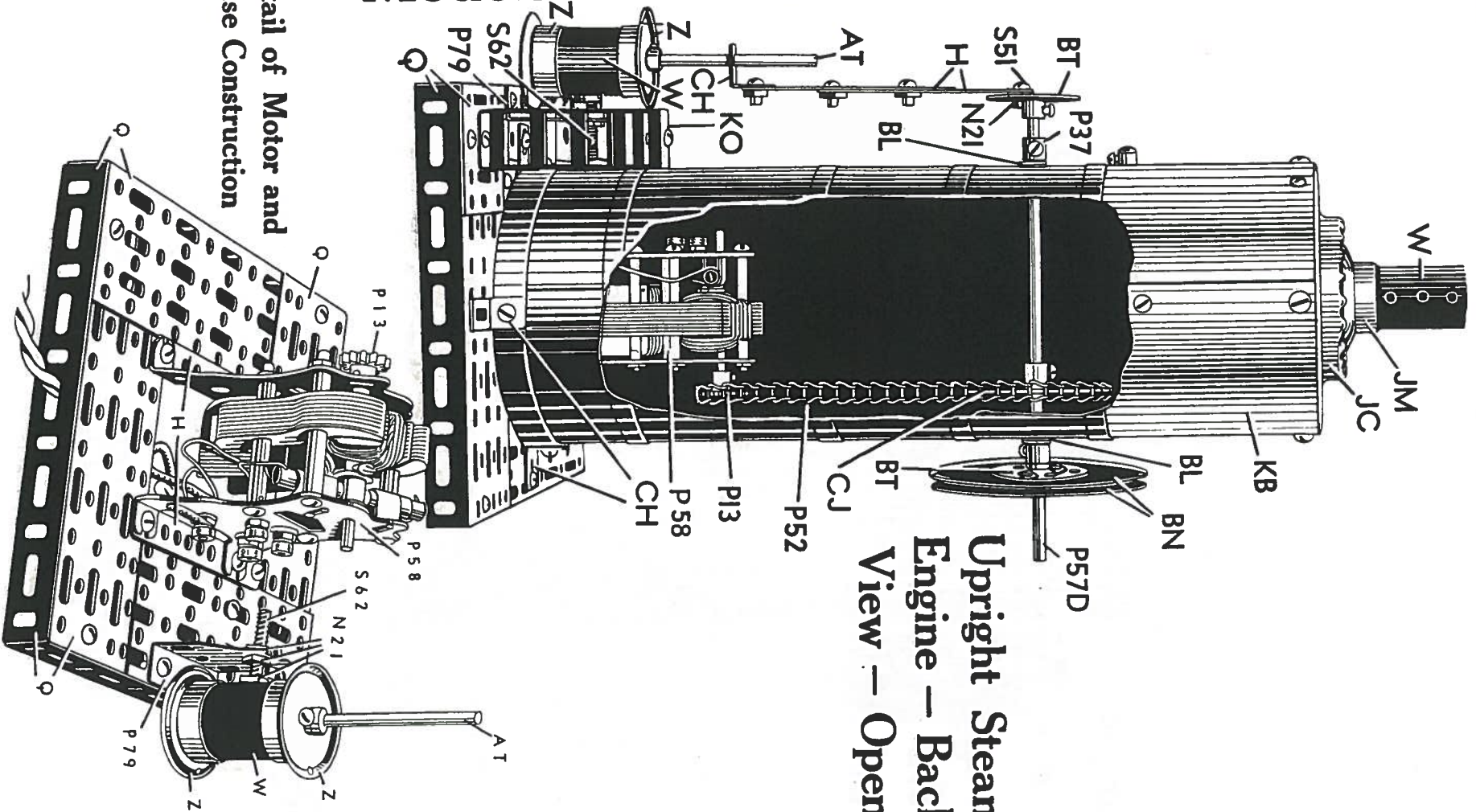
Models Built with NO. 8 Set



**Upright Steam Engine
Front View**

Models Built with NO. 8 Set

Upright Steam Engine — Back View — Open

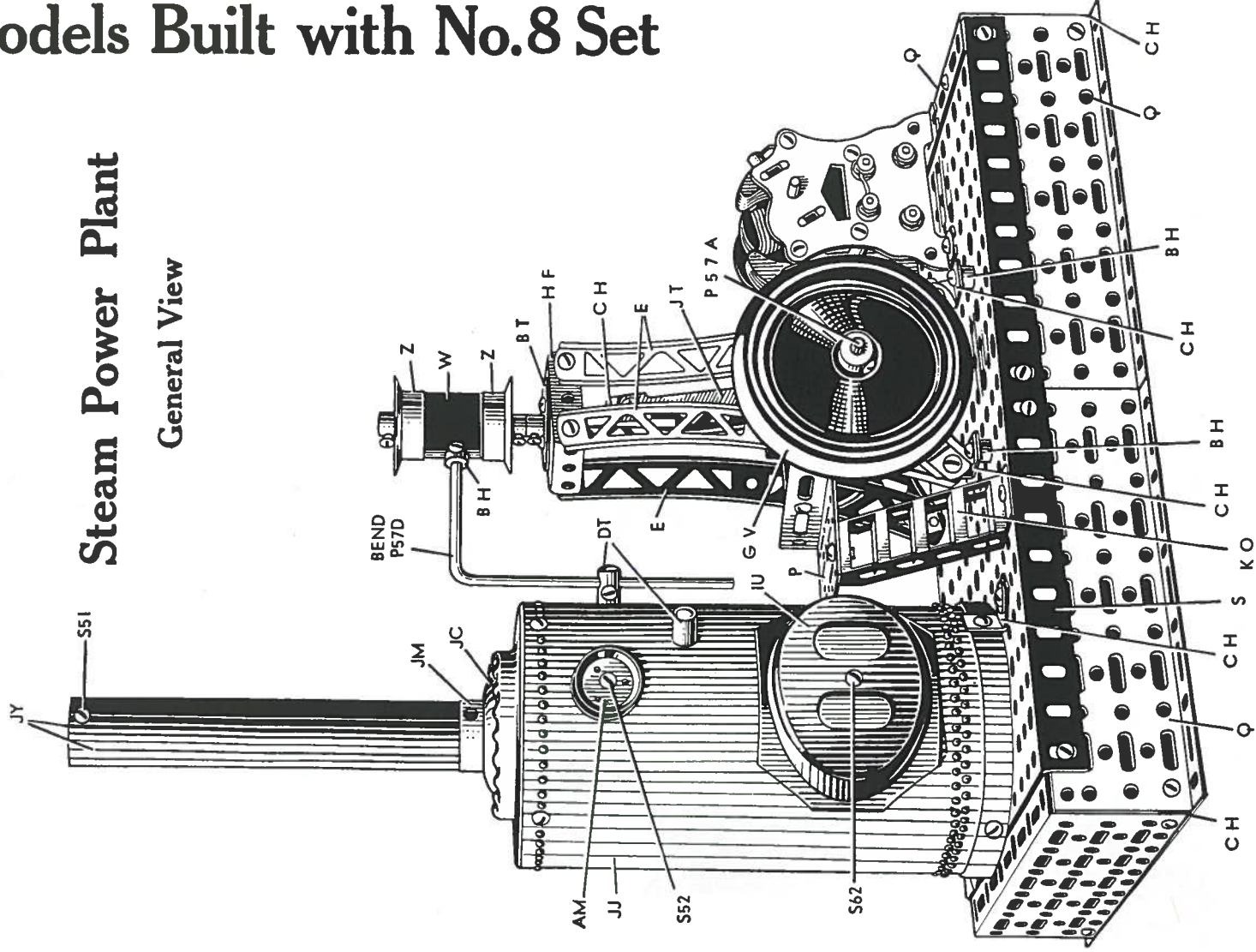


Detail of Motor and Base Construction

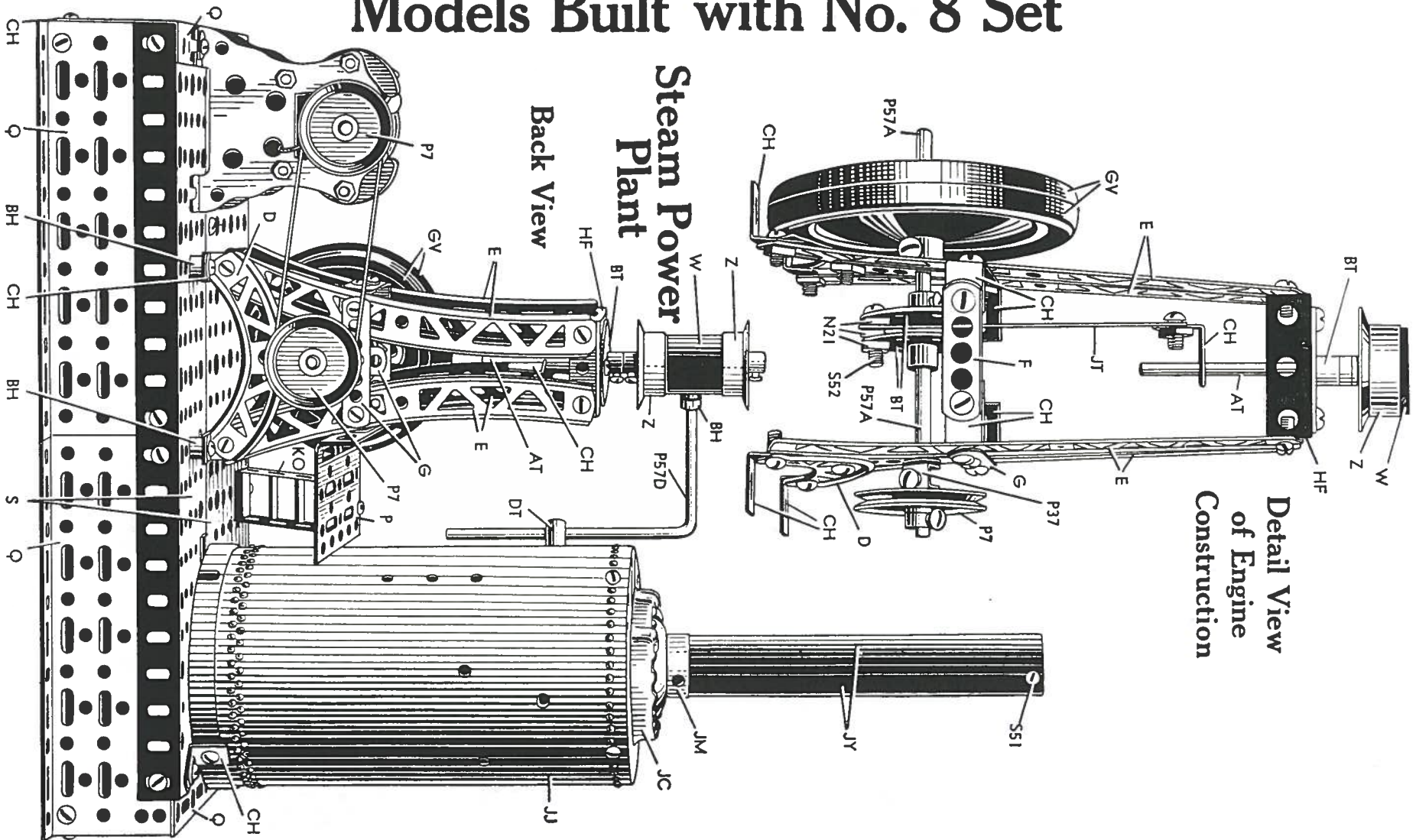
Models Built with No.8 Set

Steam Power Plant

General View



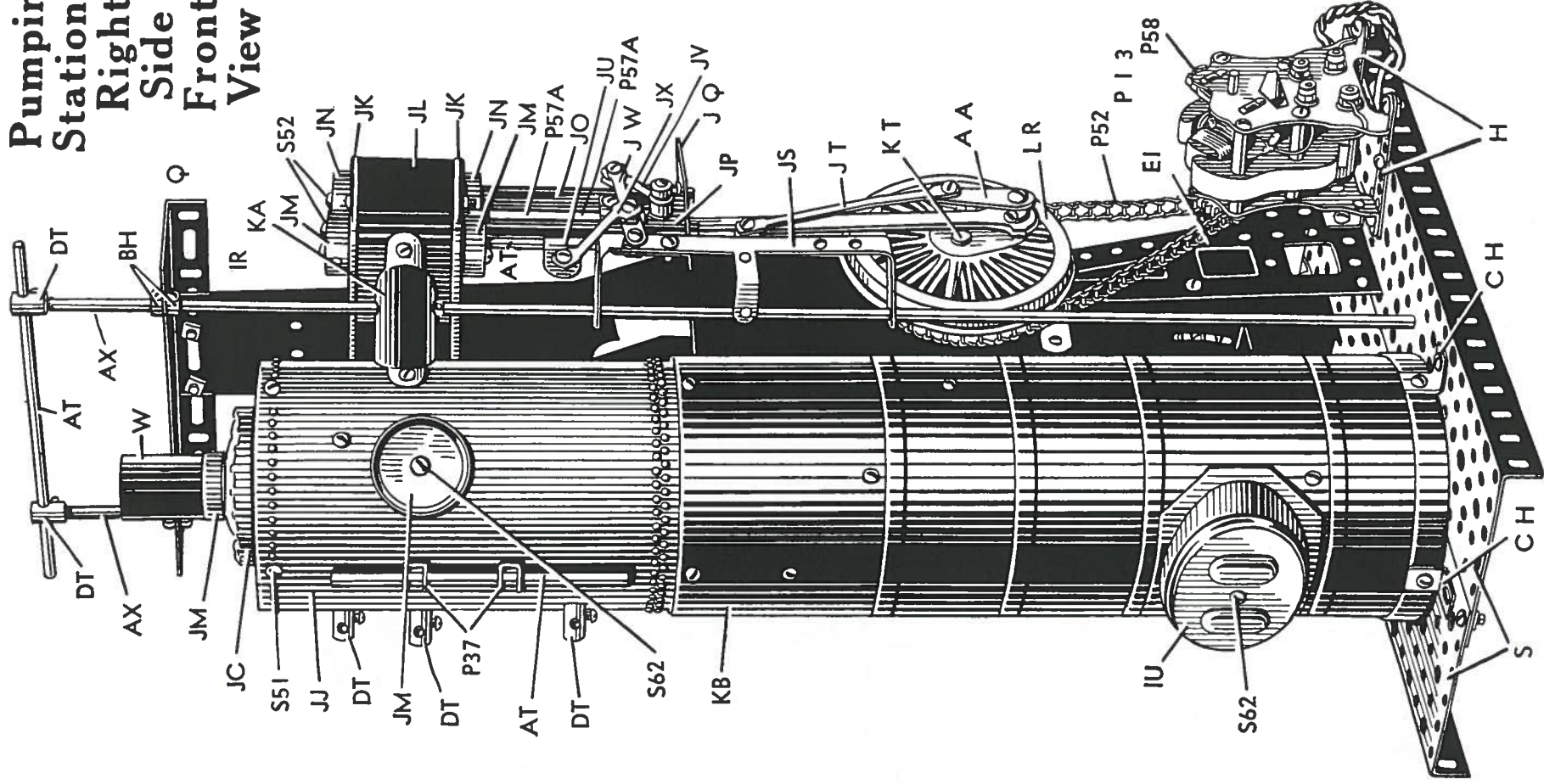
Models Built with No. 8 Set



**Detail View
of Engine
Construction**

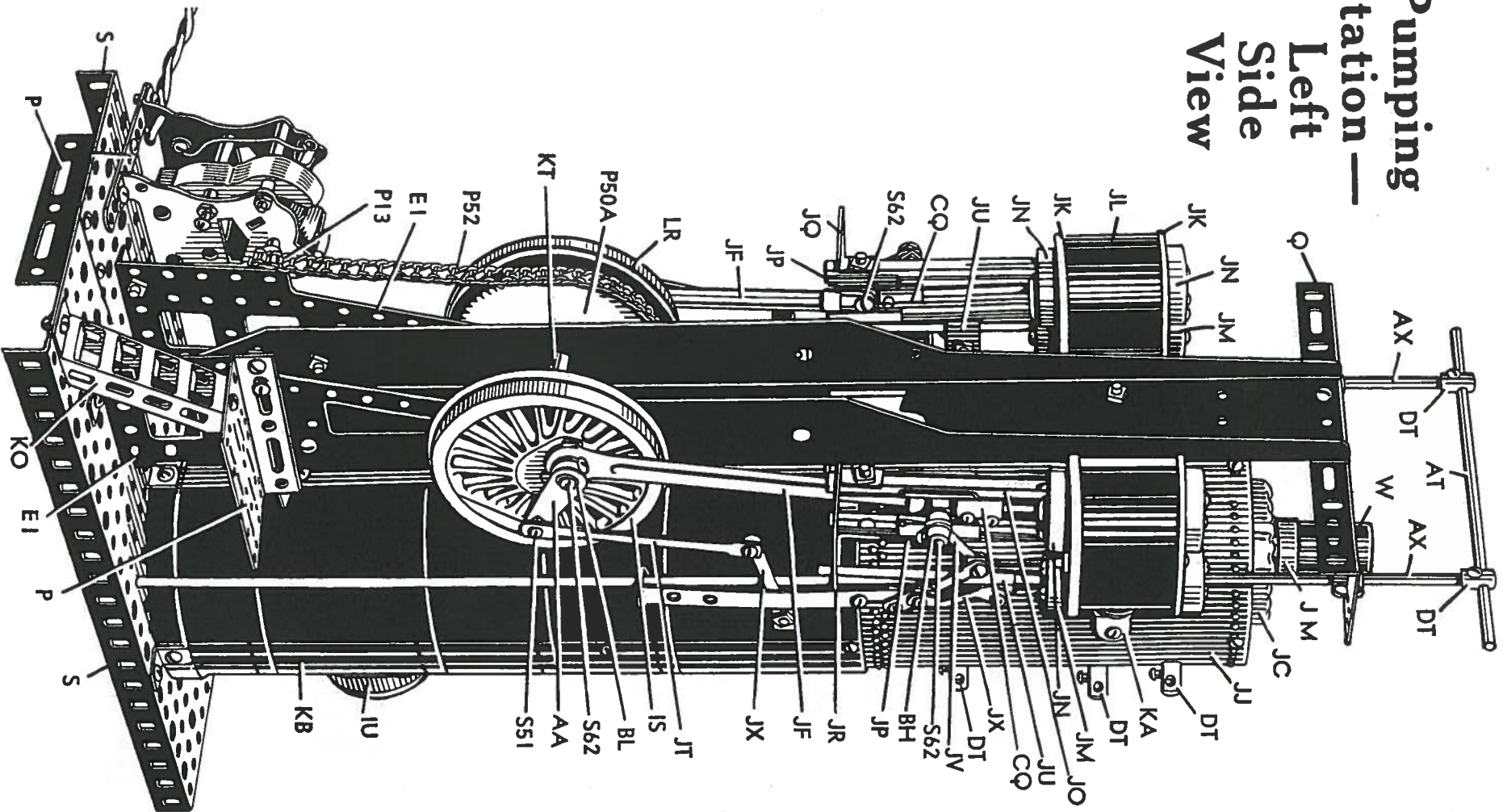
Models Built with No. 8 Set

Pumping Station --
Right Side
Front View



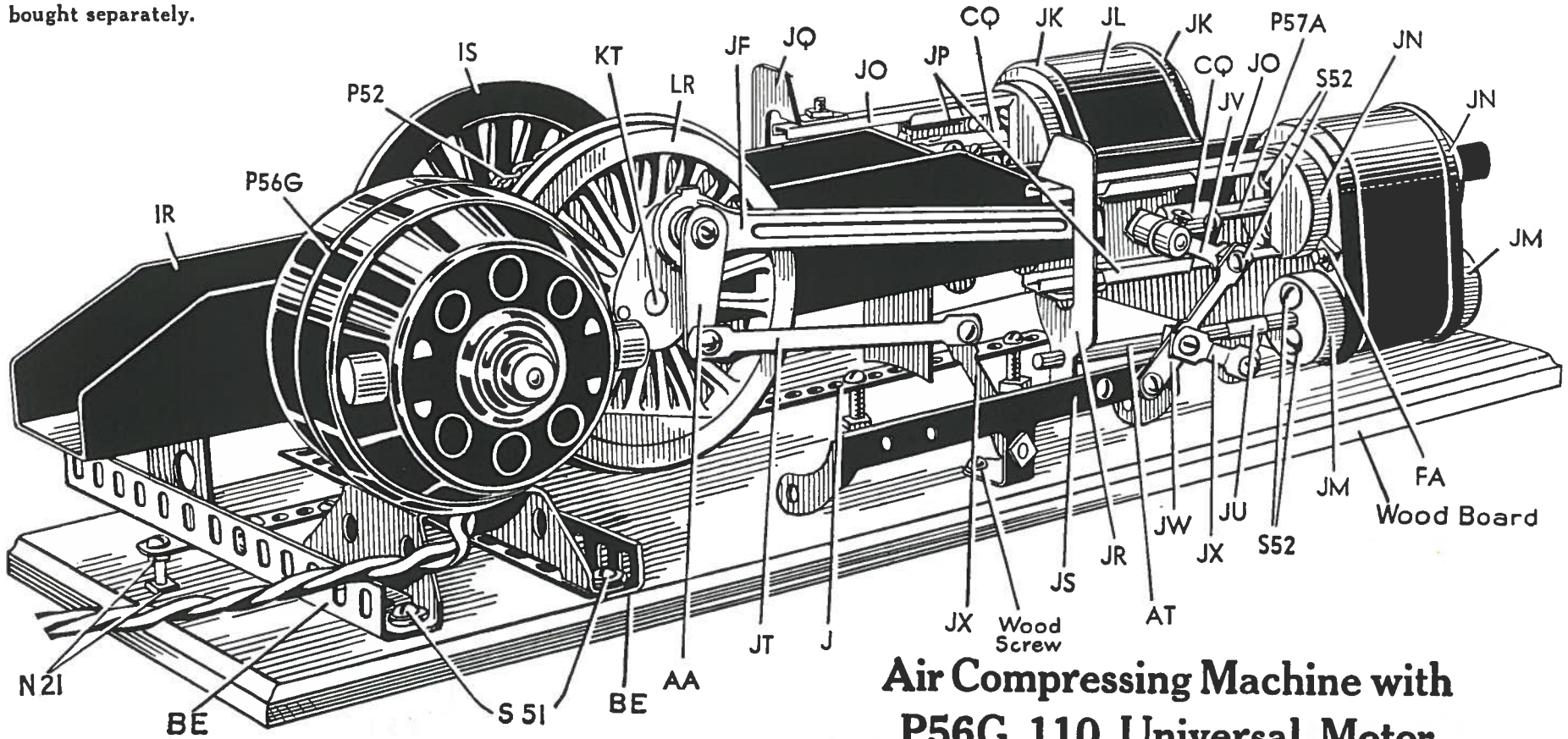
Models Built with No. 8 Set

Pumping Station — Left Side View



Models Built with No. 8 Set

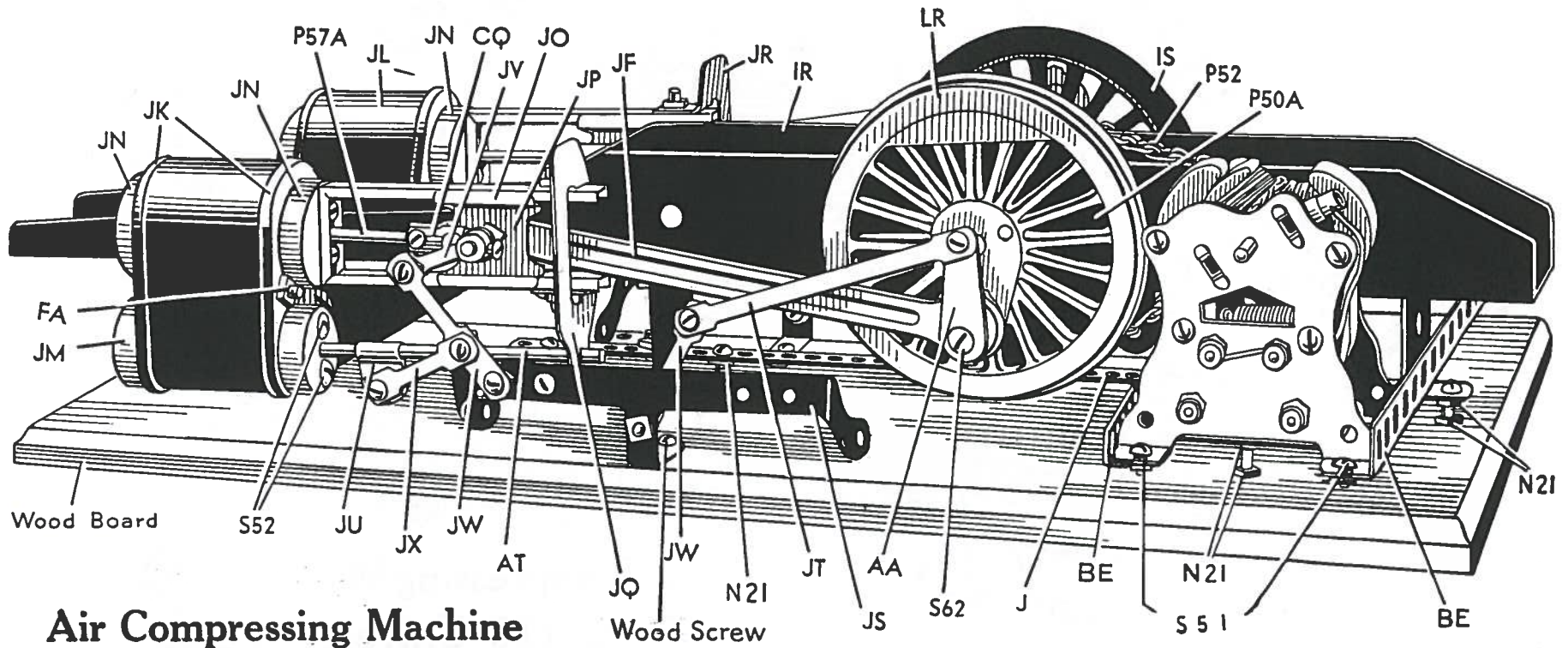
P56G Motor not furnished in sets
A, No. 8 and No. 8½. Can be
bought separately.



**Air Compressing Machine with
P56G 110 Universal Motor**

Models Built with No. 8 Set

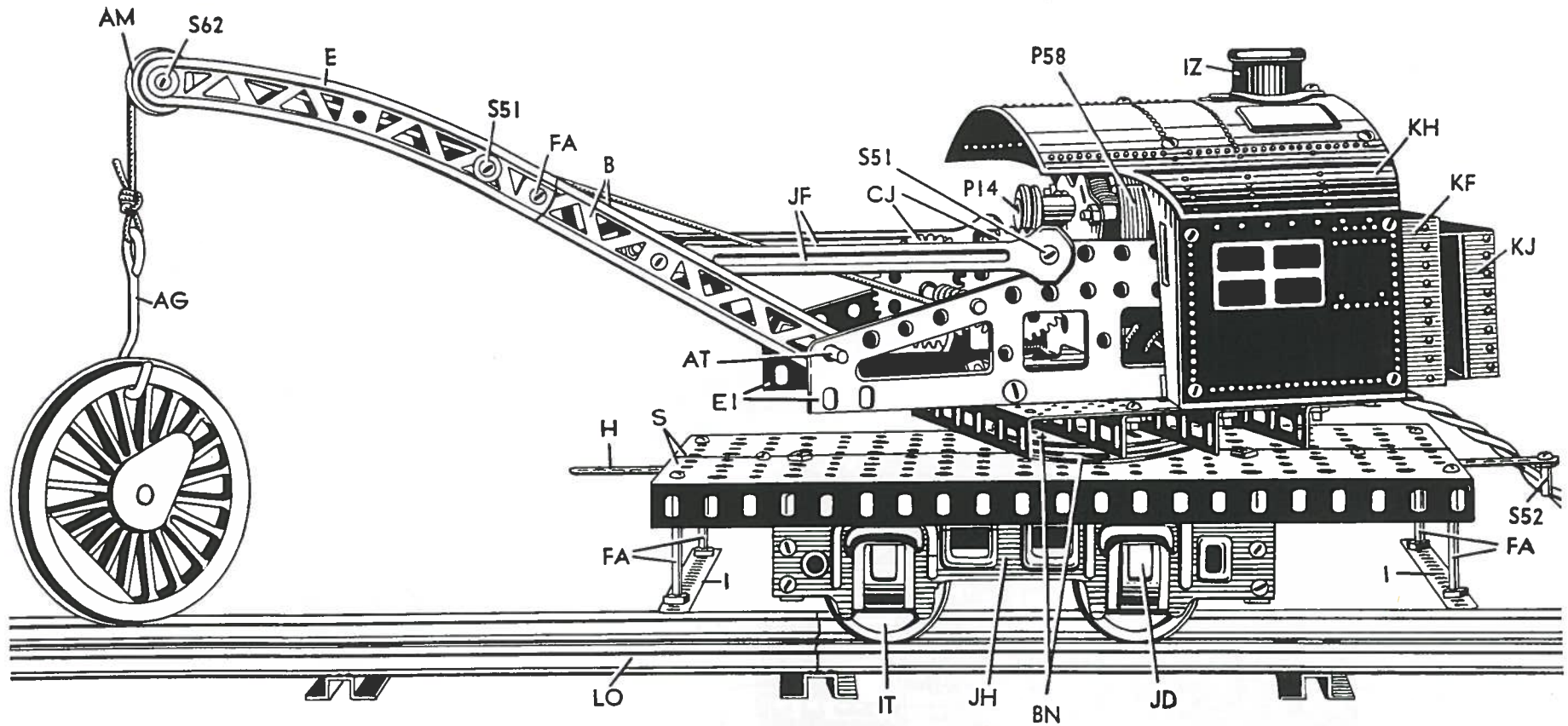
Air Compressing Machine with P58 Battery Motor



Air Compressing Machine

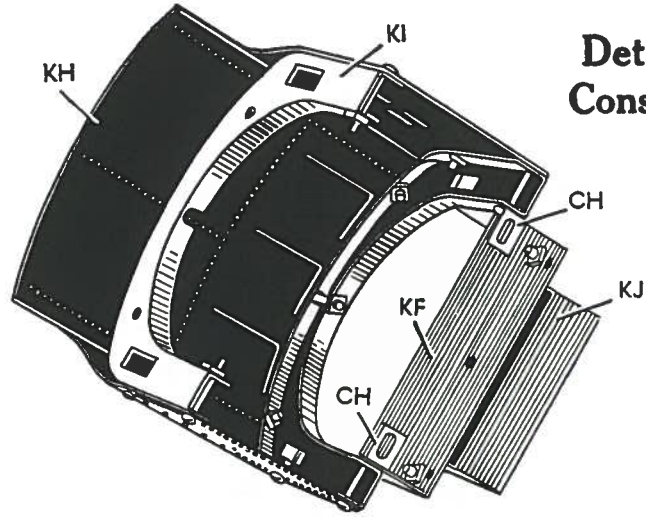
Models Built with No. 8 Set

SEC. D

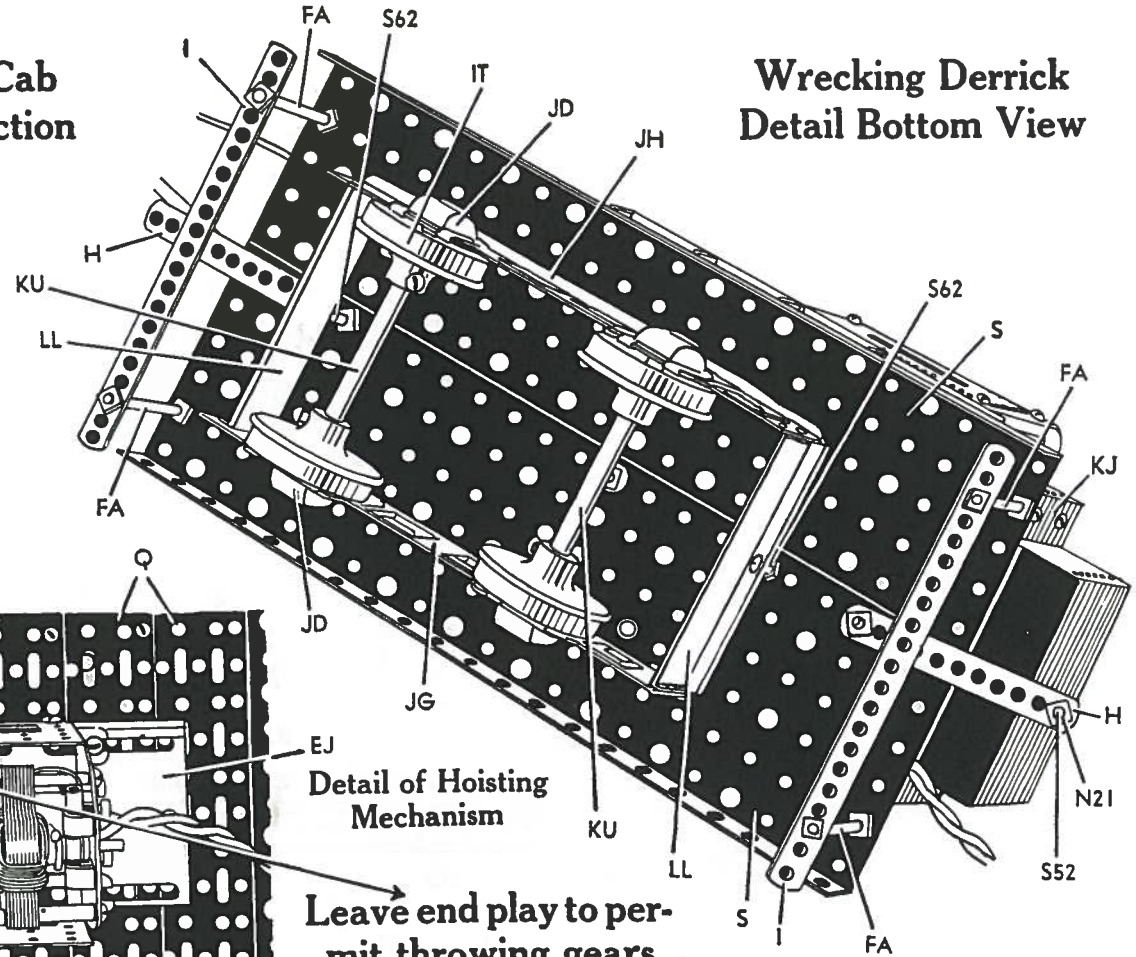


Wrecking Derrick

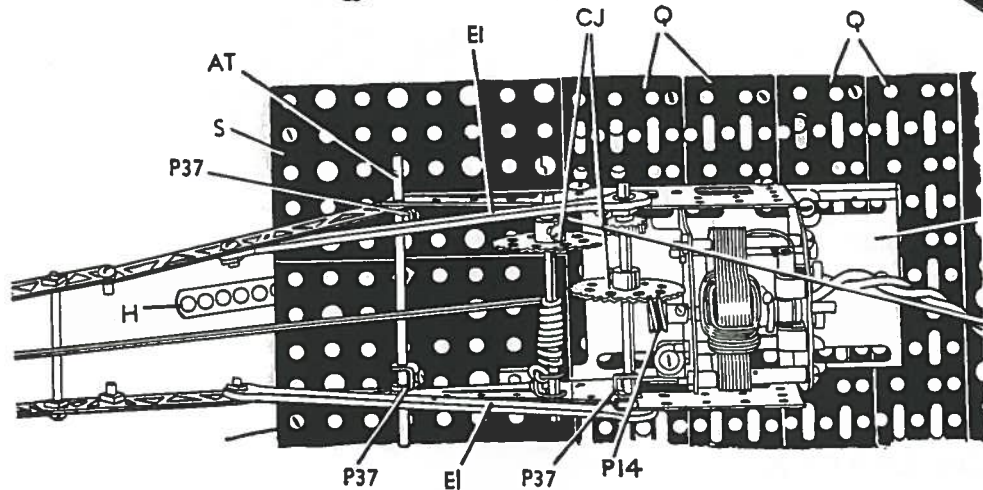
Models Built with No. 8 Set



Detail Cab Construction



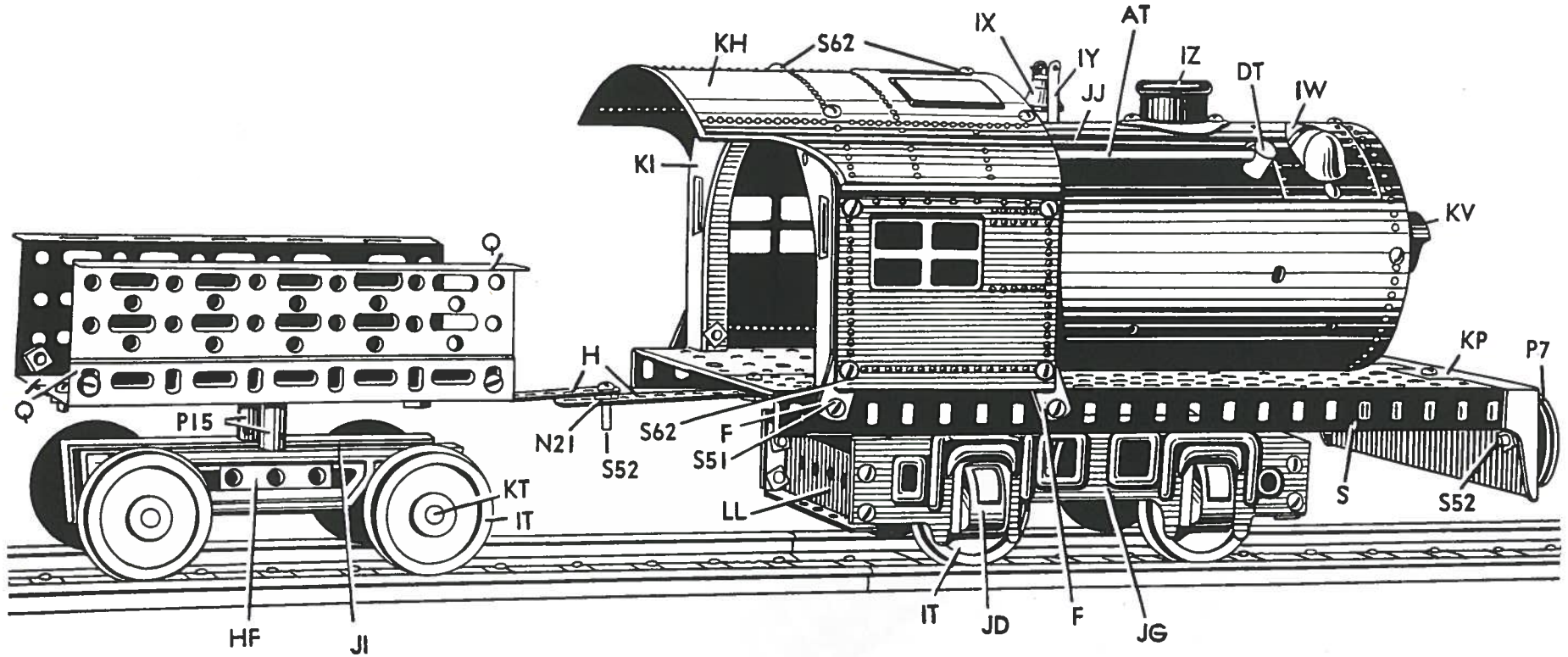
Wrecking Derrick Detail Bottom View



Detail of Hoisting Mechanism

Leave end play to permit throwing gears out and into mesh.

Models Built with No. 8 Set

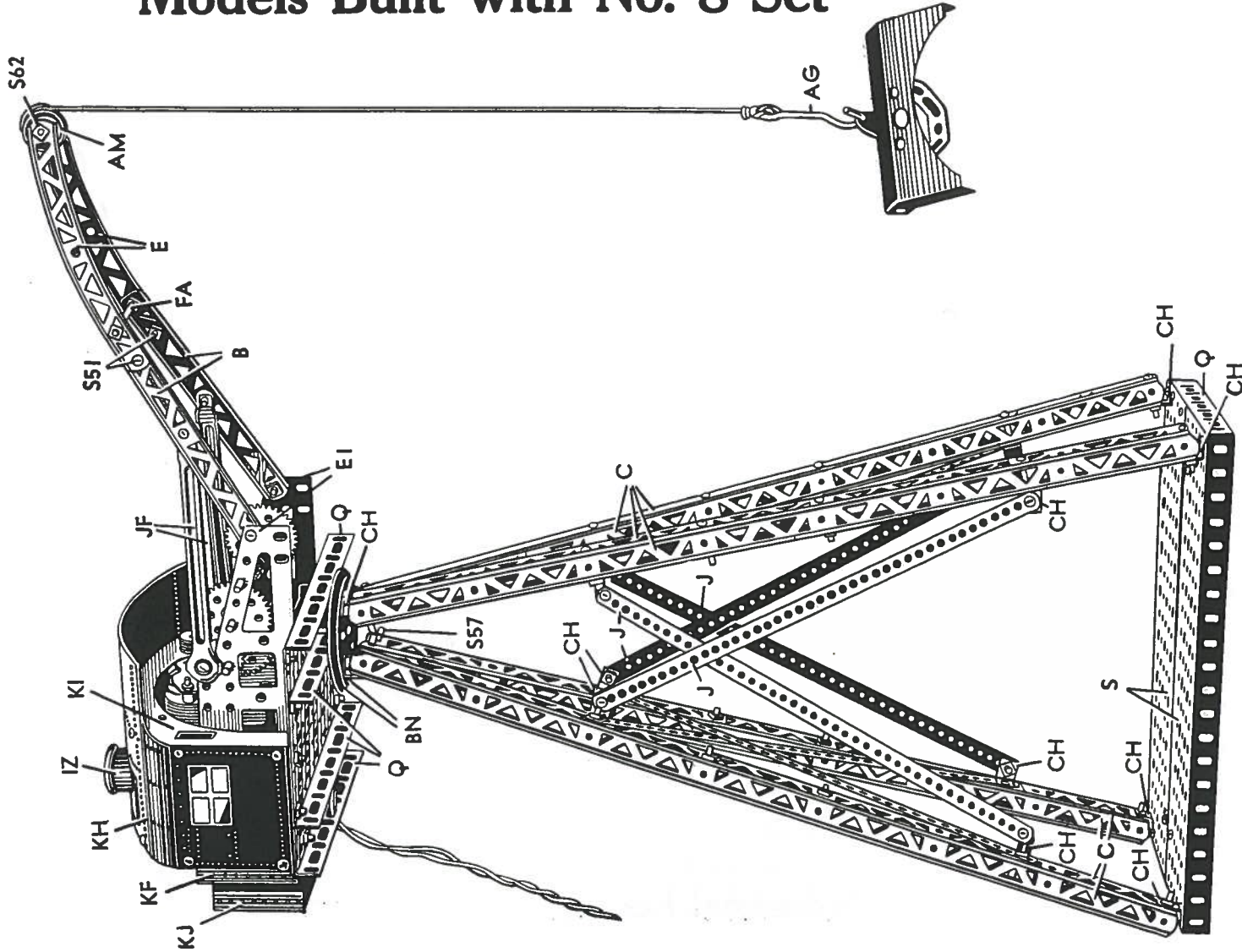


Industrial Locomotive with Trailer

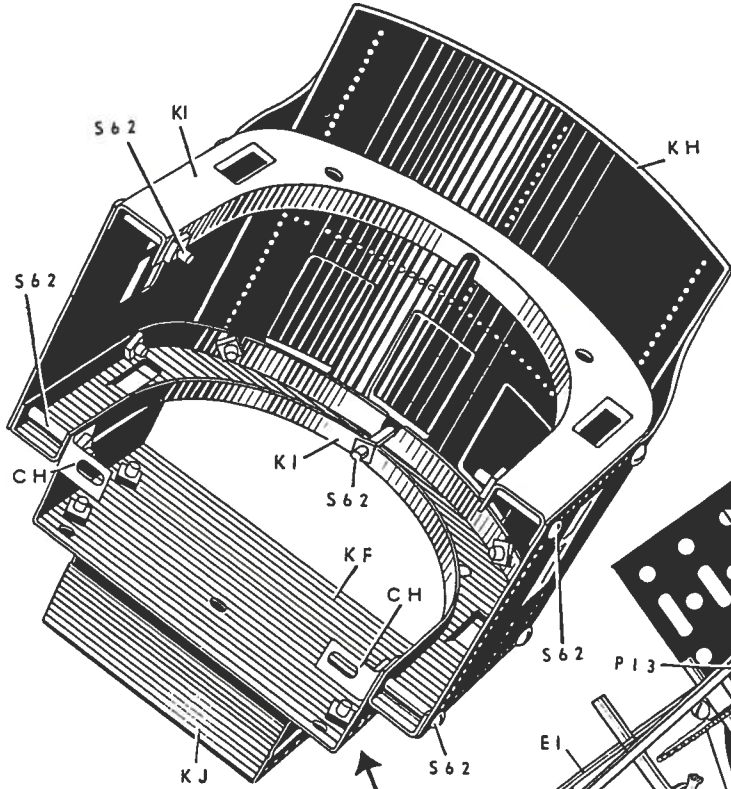
Electric Revolving Crane

Models Built with No. 8 Set

General View



Models Built with No. 8 Set

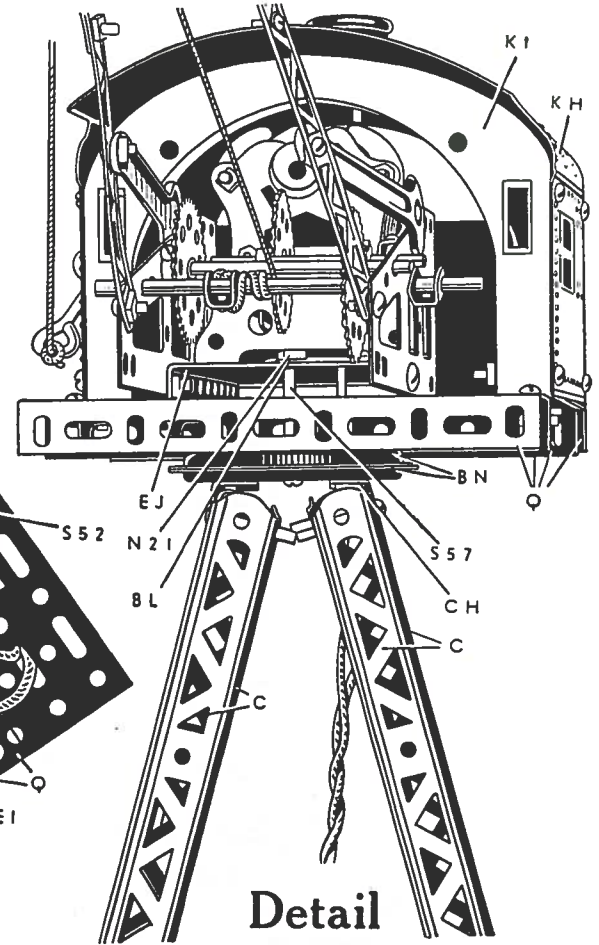
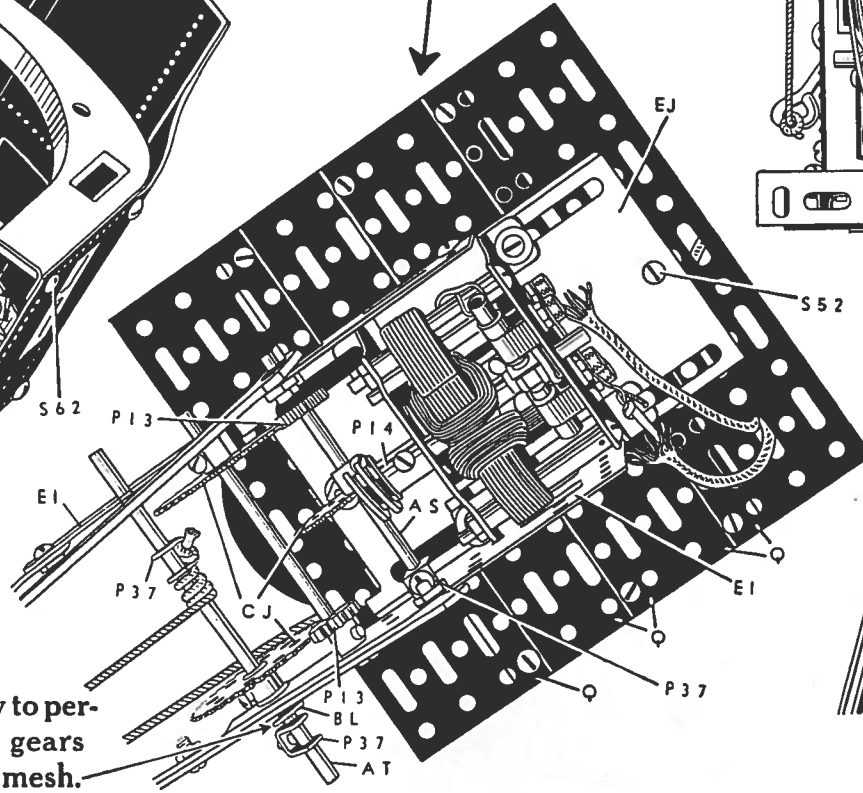


**Electric
Revolving
Crane**

**Detail Cab
Construction**

Leave end play to permit throwing gears out and into mesh.

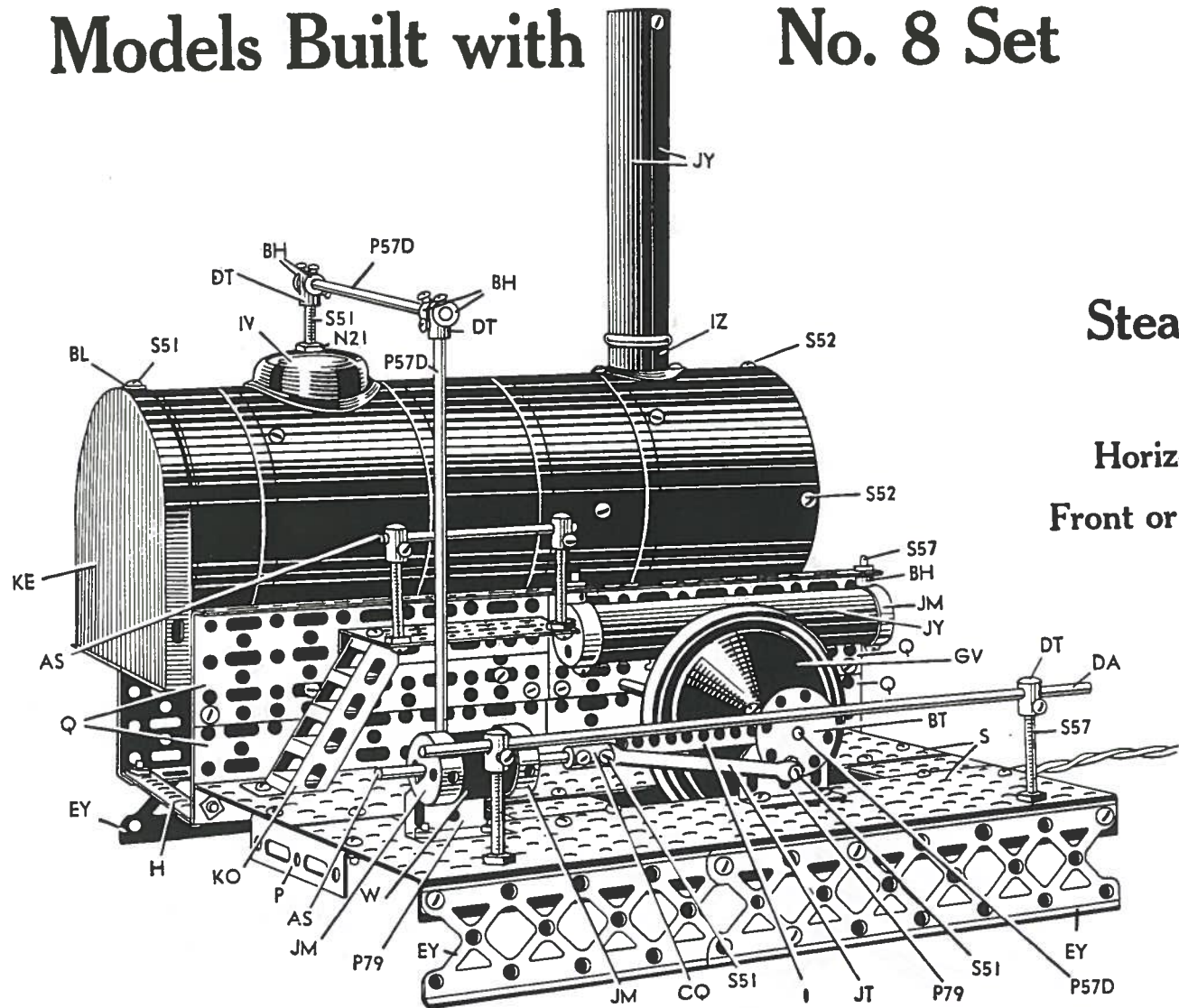
**Detail
Gearing**



**Detail
Swivel**

Models Built with

No. 8 Set

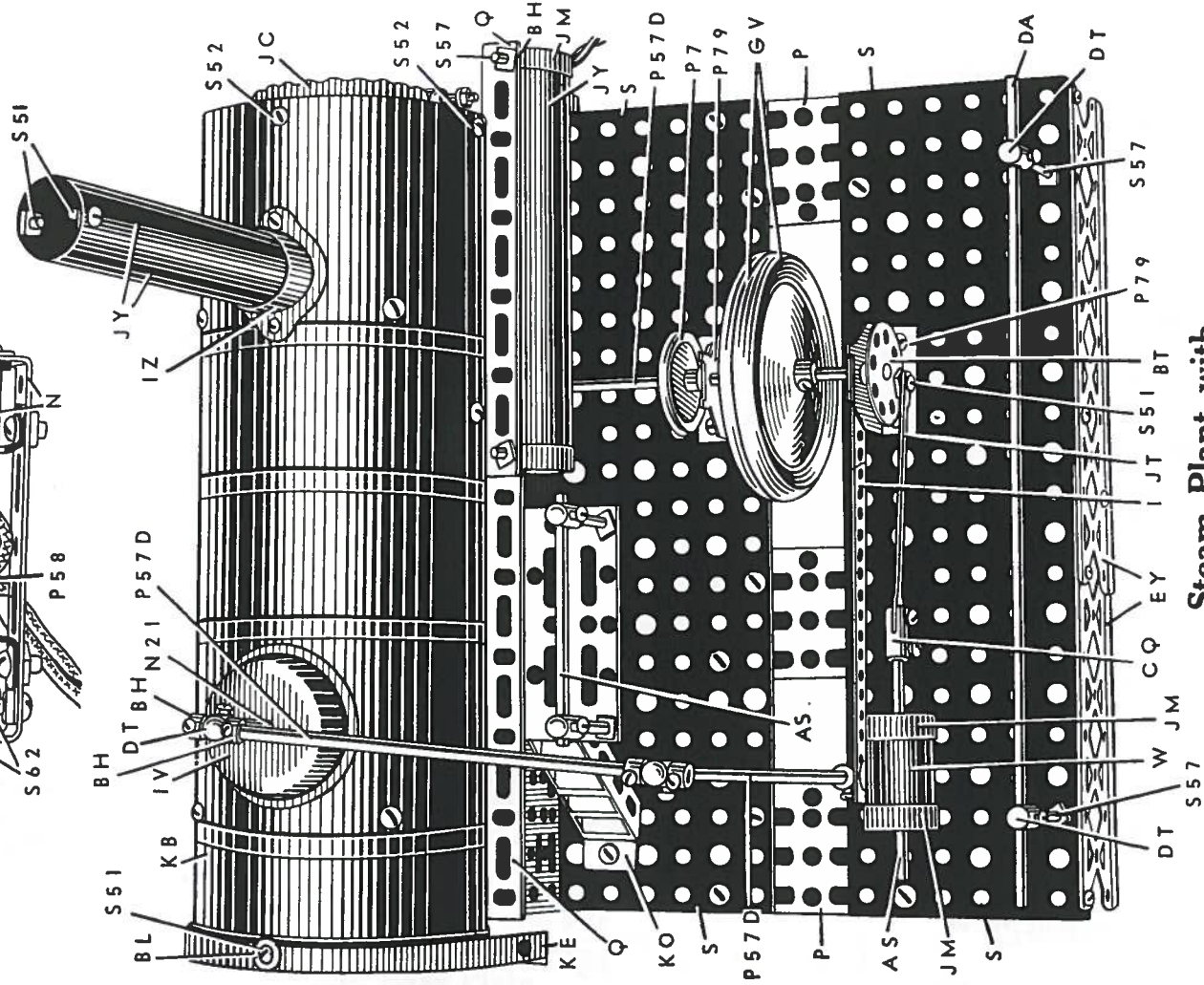
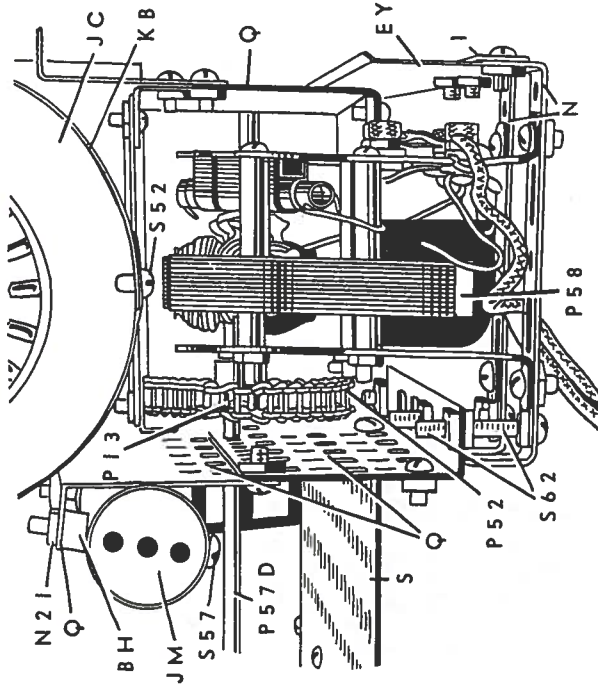


Steam Plant

Horizontal Engine
Front or General View

Models Built with No. 8 Set

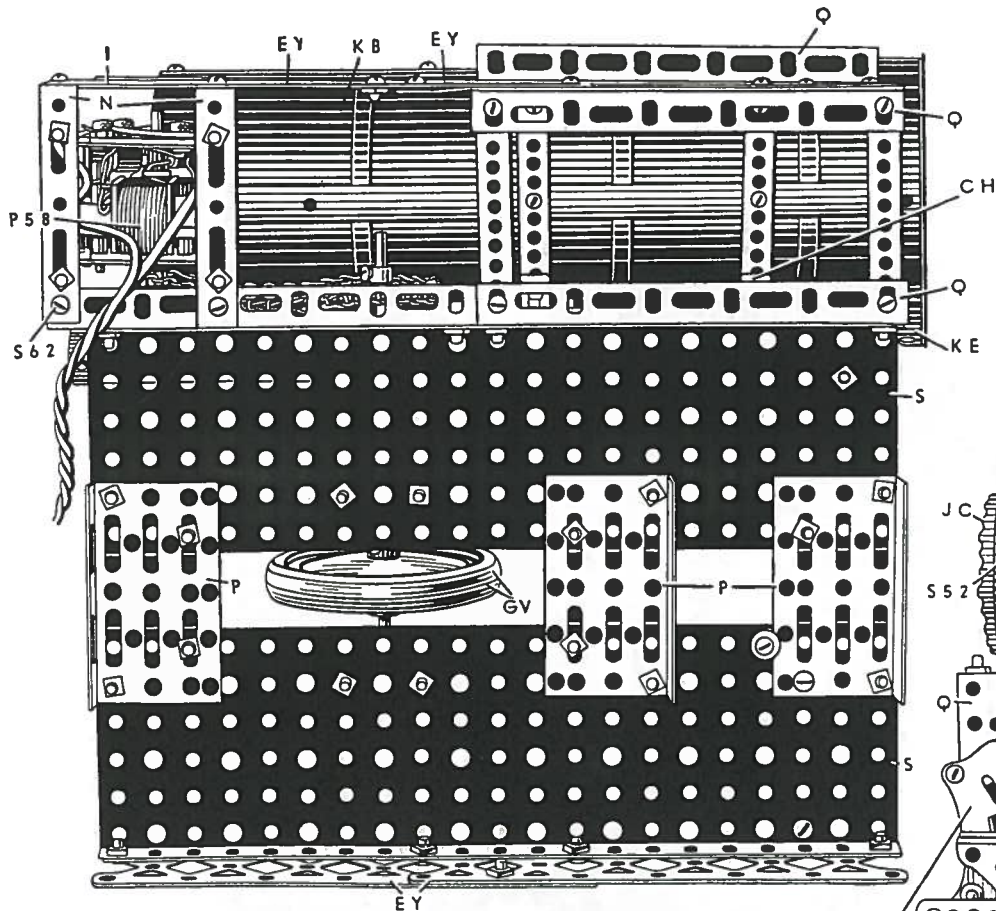
Detail Motor Installation



**Steam Plant with
Horizontal Engine**

Top View

Models Built with No. 8 Set

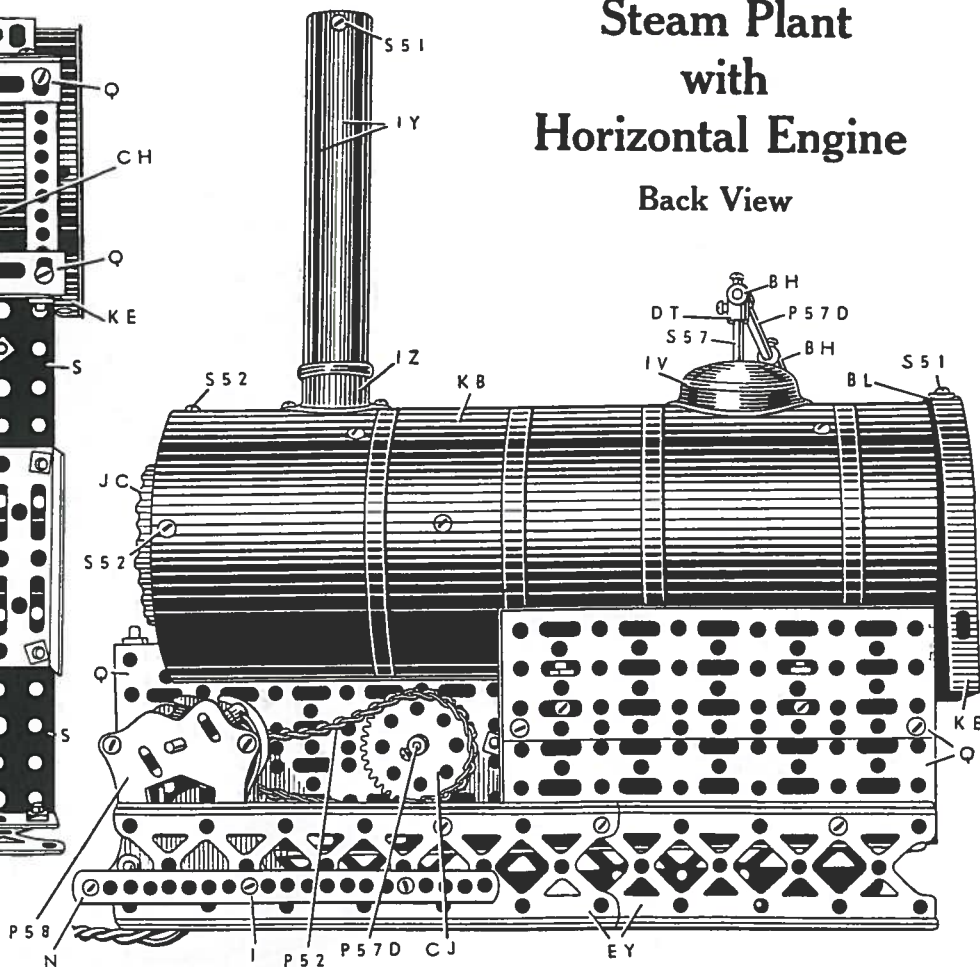


Bottom View

Steam Plant with Horizontal Engine

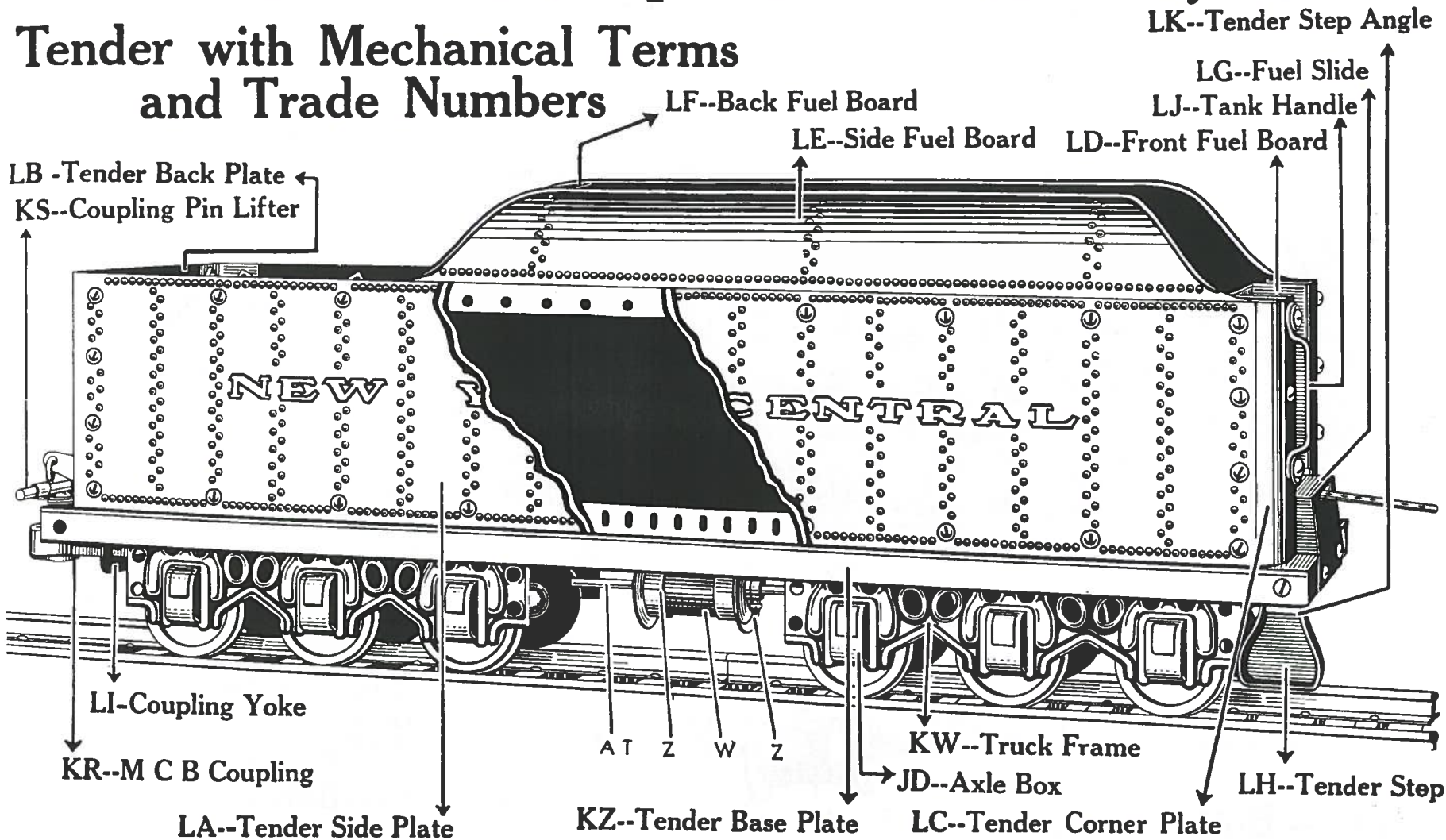
Steam Plant with Horizontal Engine

Back View

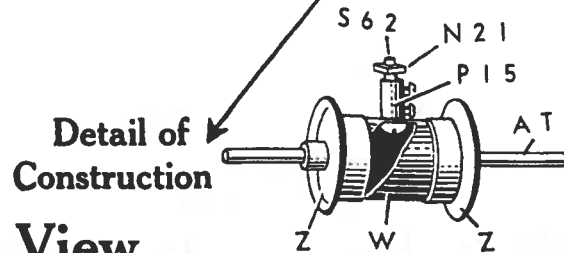
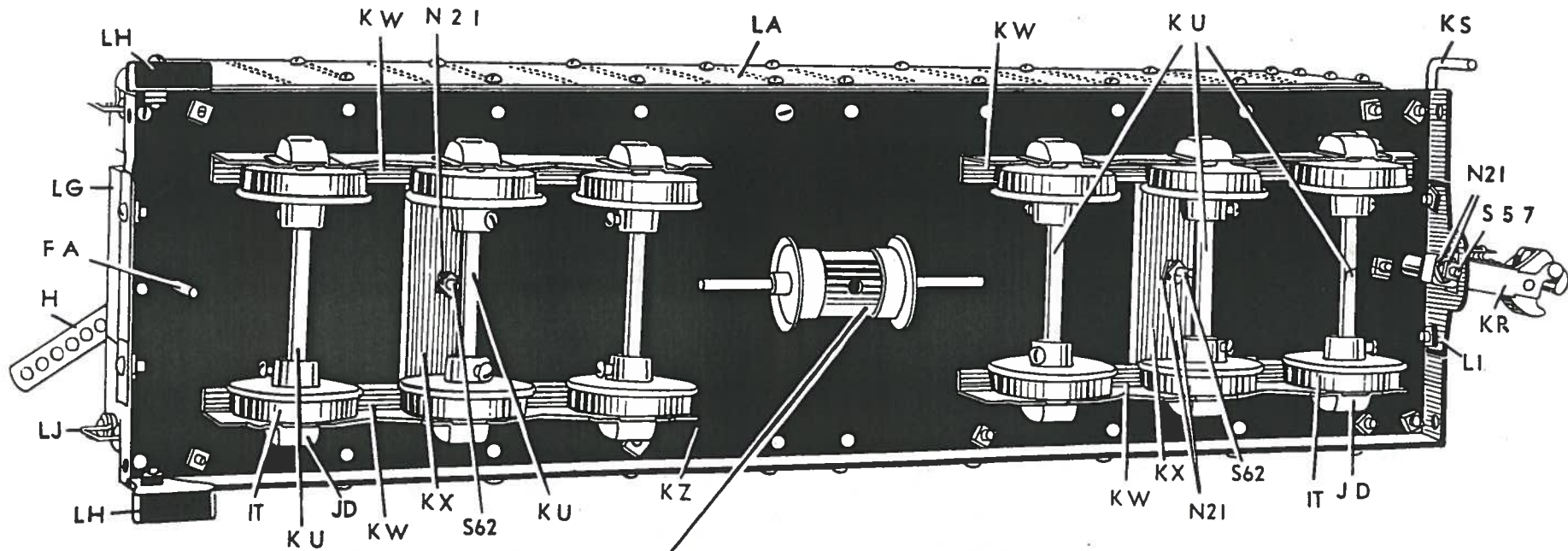


Models Built with No. 8½ Set and No. T Accessory Set

Tender with Mechanical Terms and Trade Numbers



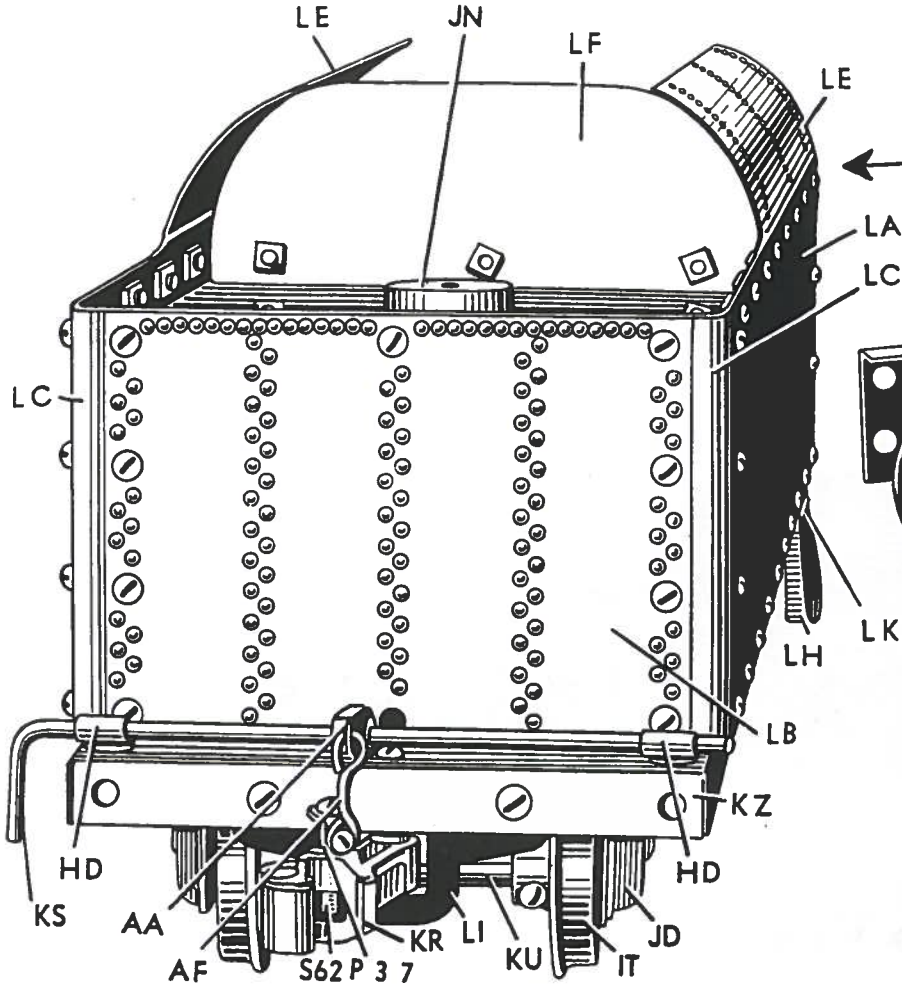
Models Built with No. 8½ Set and No. T Accessory Set



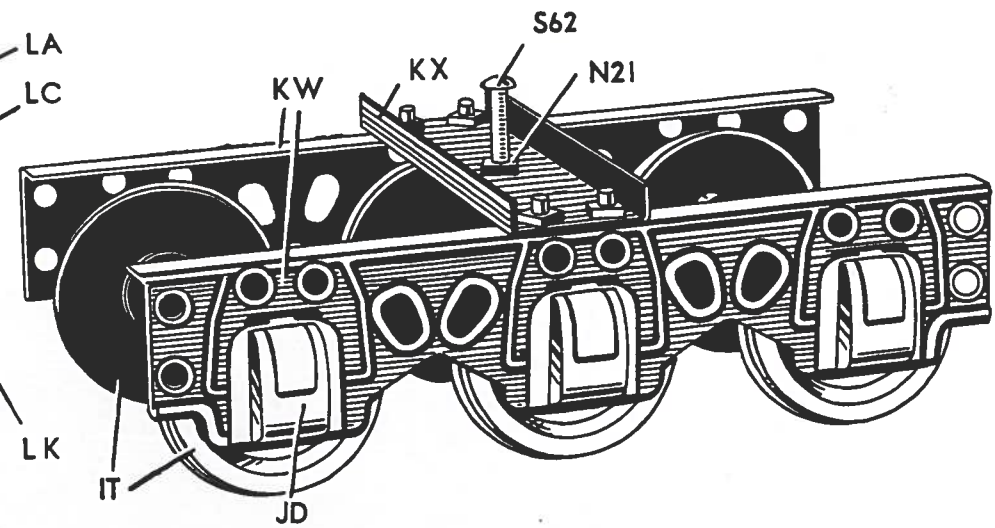
Note: This detail applies to all double truck models. To build Trucks see detail Truck Construction.

Tender – Bottom View

Models Built with No. 8½ Set and No. T Accessory Set

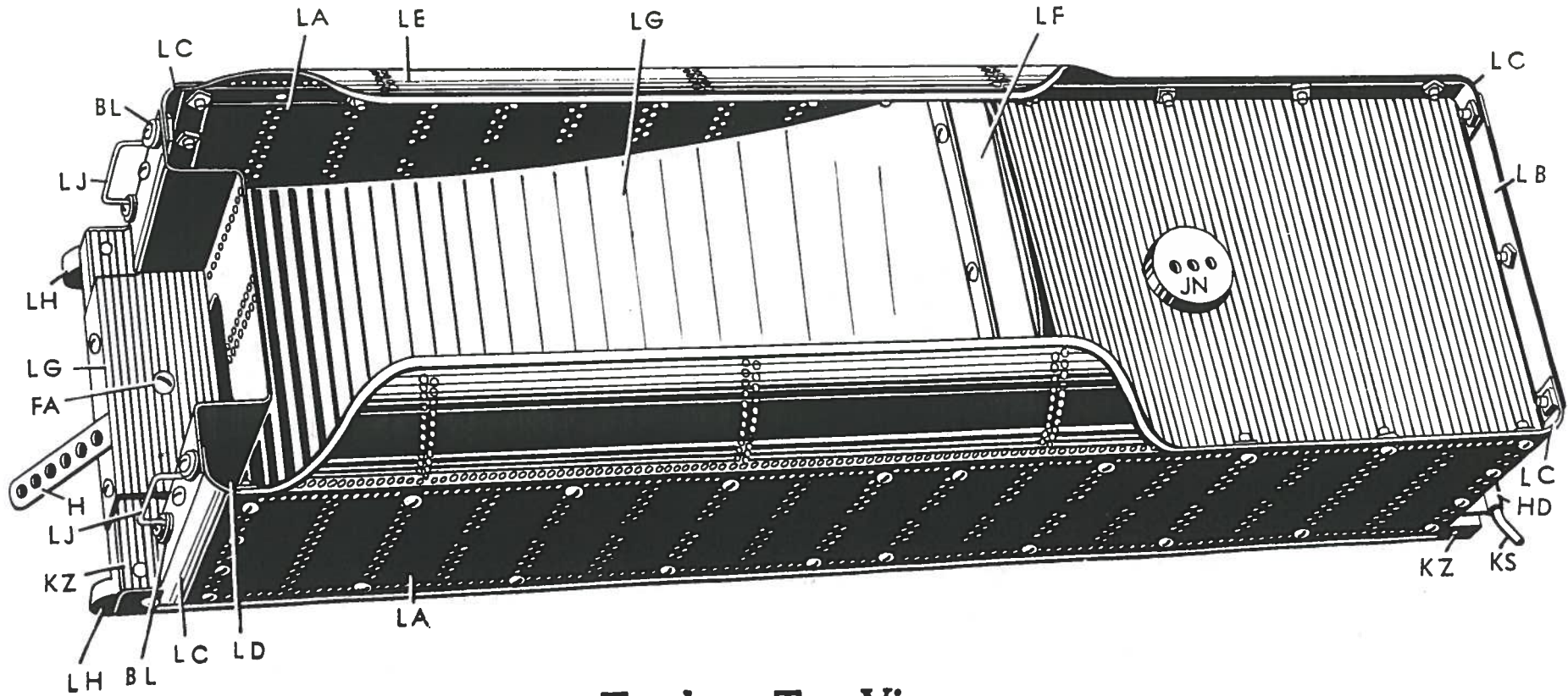


Tender
Rear End View



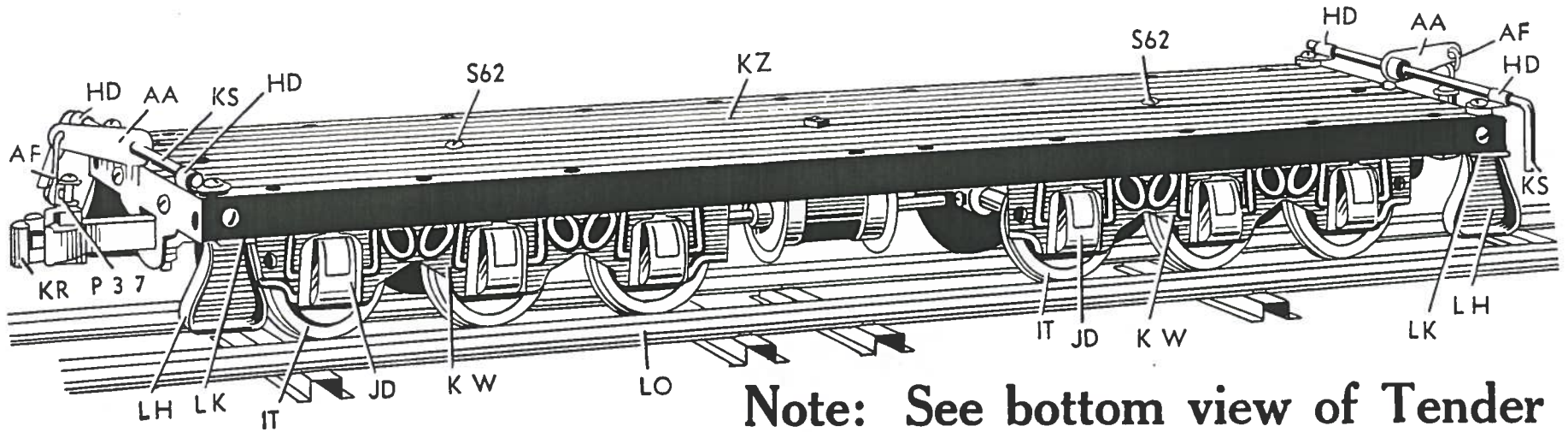
Tender
Detail Truck Construction.

Models Built with No. 8½ Set and No. T Accessory Set



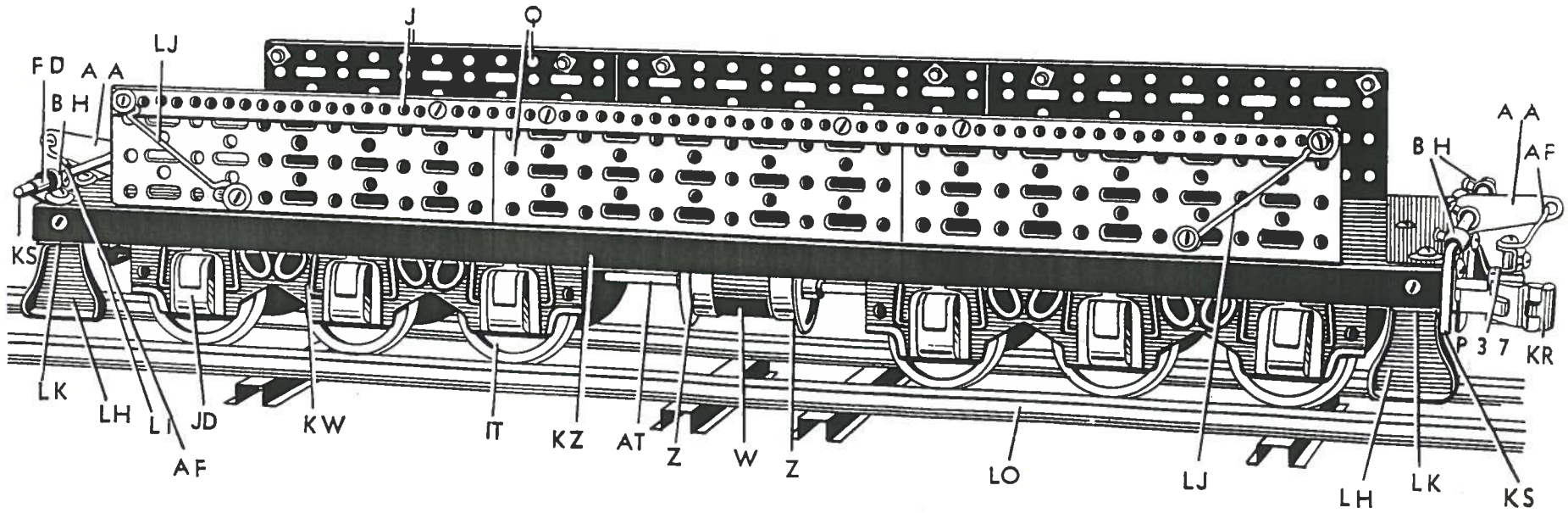
Tender—Top View

Models Built with No. 8½ Set



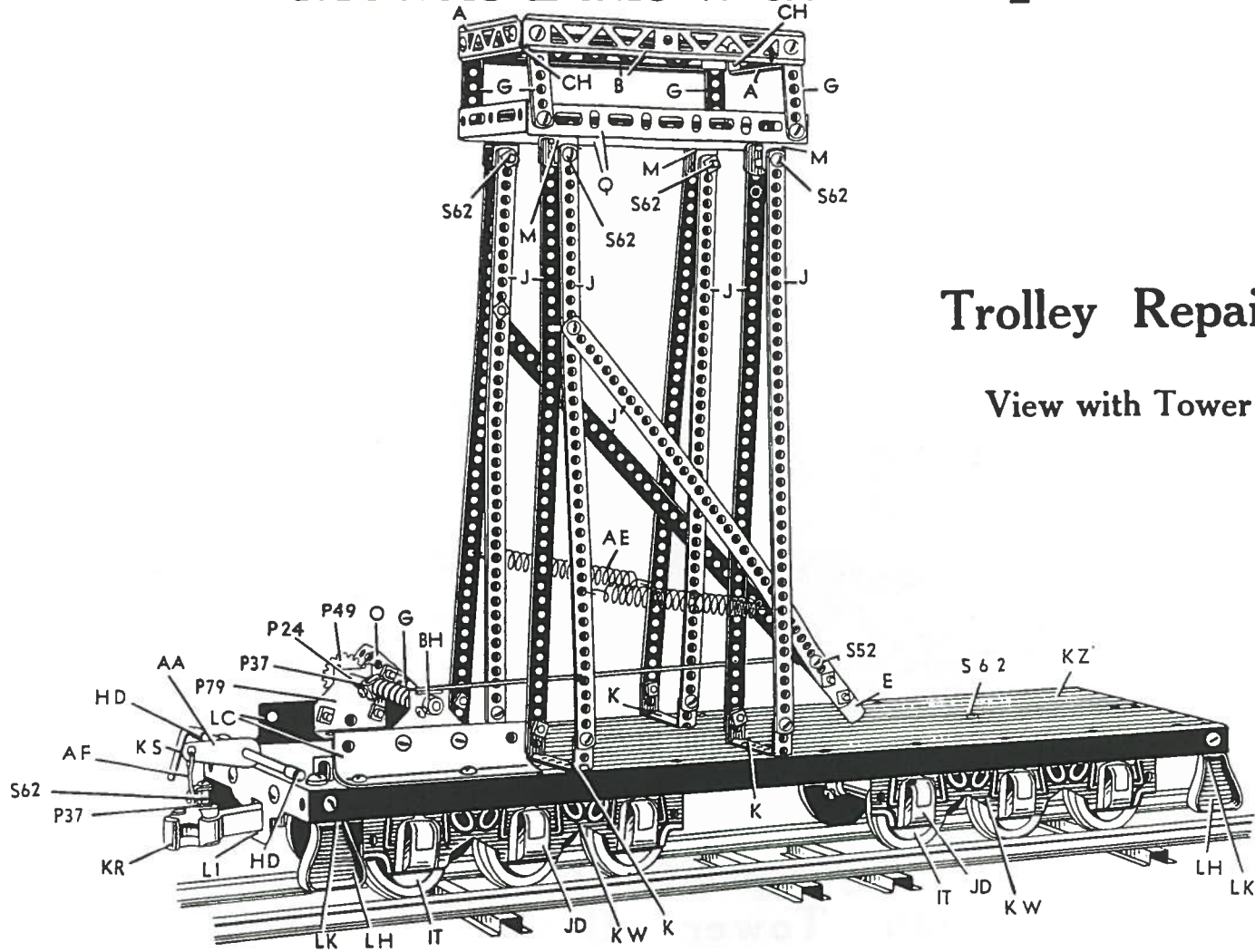
Note: See bottom view of Tender to understand underneath construction. To Build trucks see detail of Truck Construction.

Models Built with No. 8½ Set



Timber Car
Double Truck

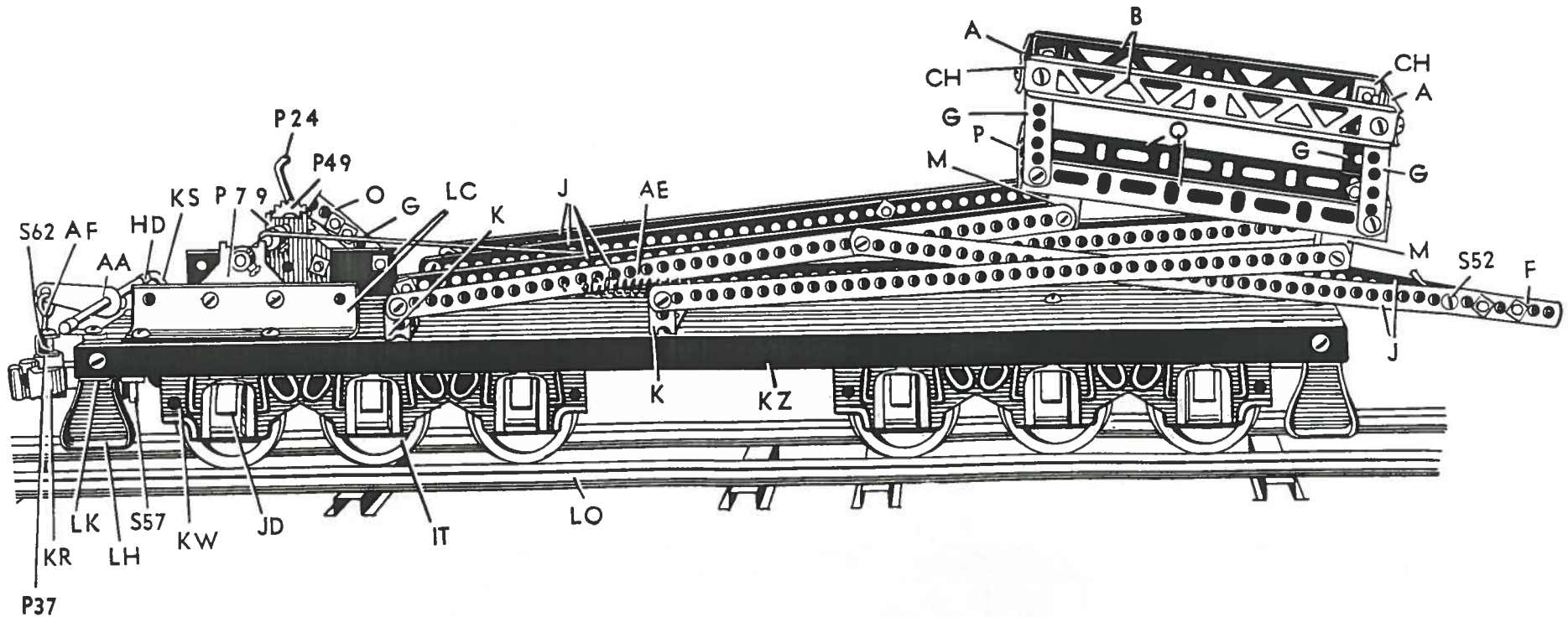
Models Built with No. 8½ Set



Trolley Repair Car

View with Tower Raised

Models Built with No. 8½ Set

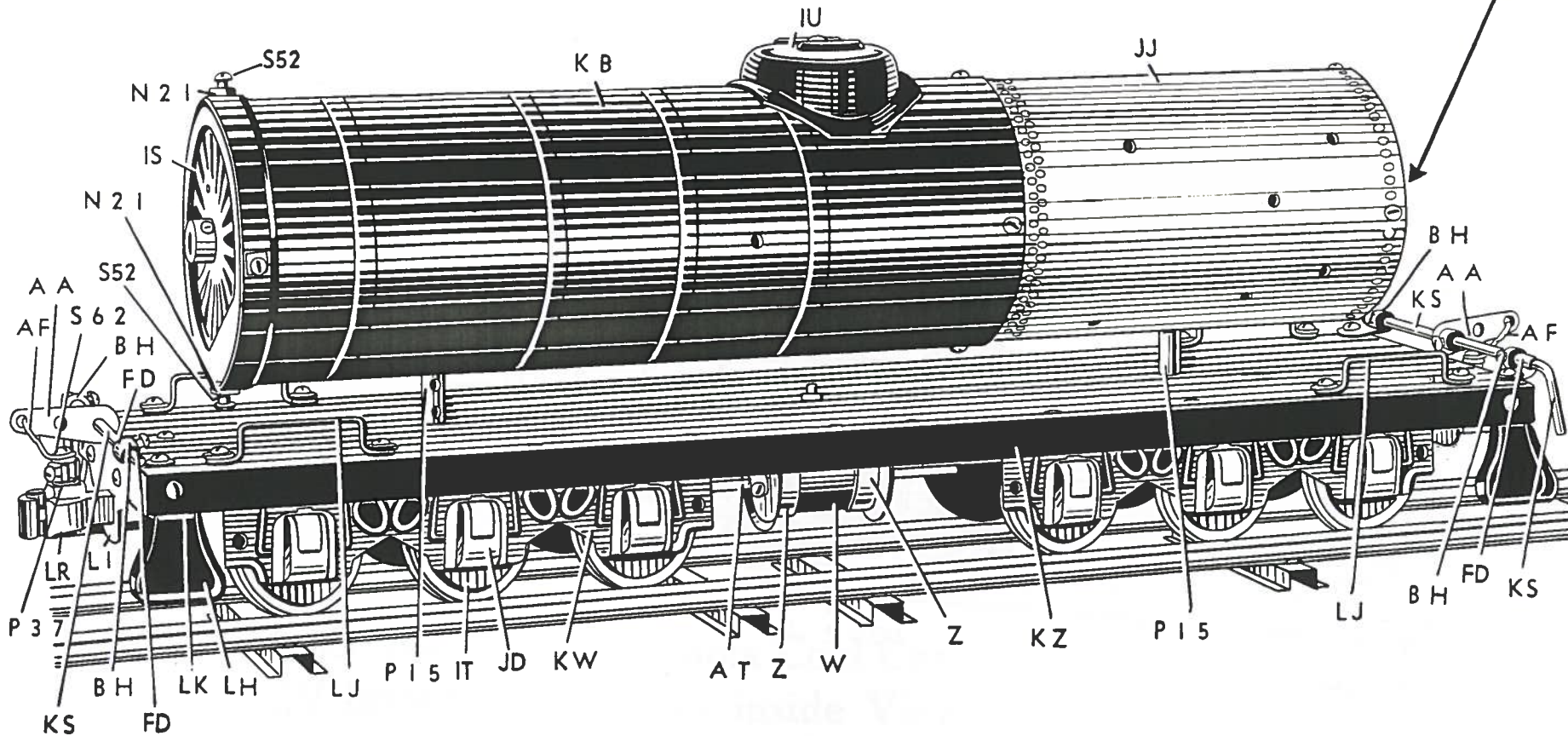


Trolley Repair Car-View
with Tower Down

SEC.-E

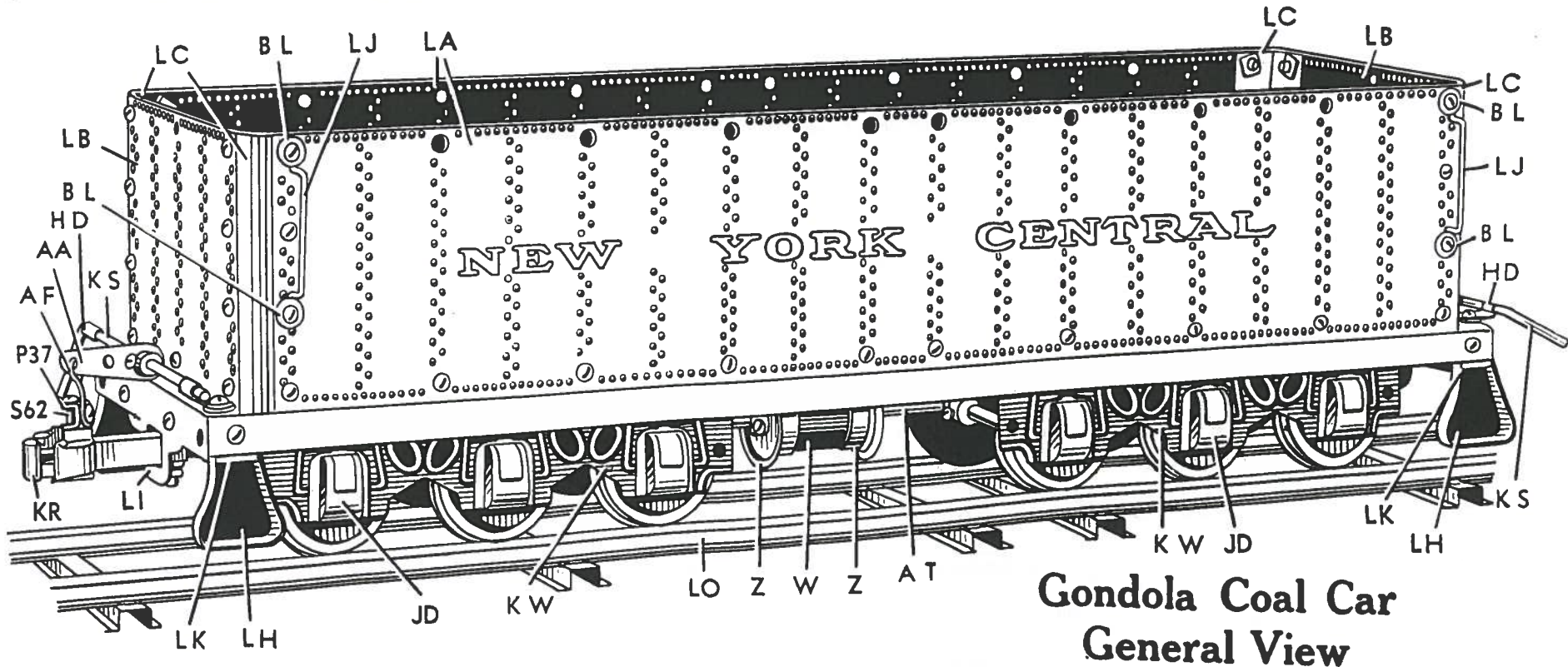
Models Built with No. 8½ Set Tank Car Double Truck

Note: Use JC
Smoke Box front
to stop up this end
of Tank.

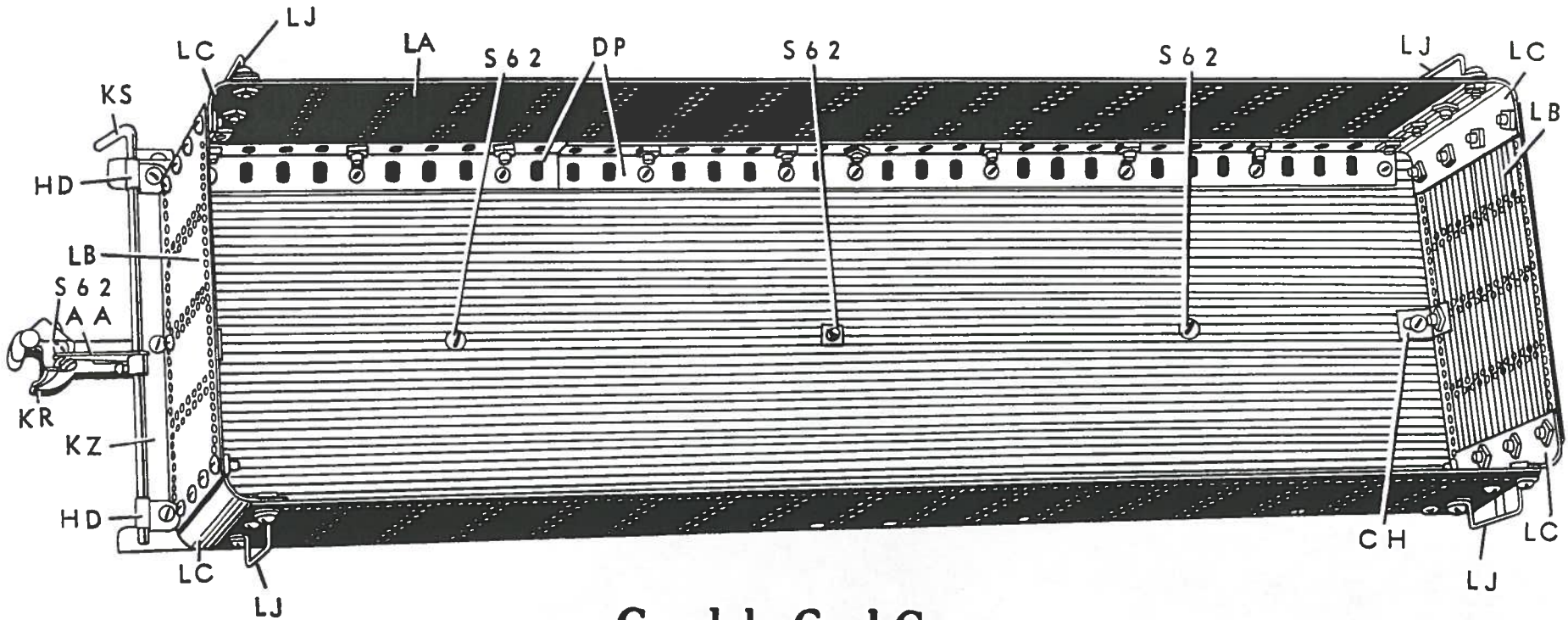


Models Built with No. 8½ Set

Note: Look at Truck Detail Construction of Tender for Truck Construction of this model.
Look at bottom view of Tender for bottom construction of this model.

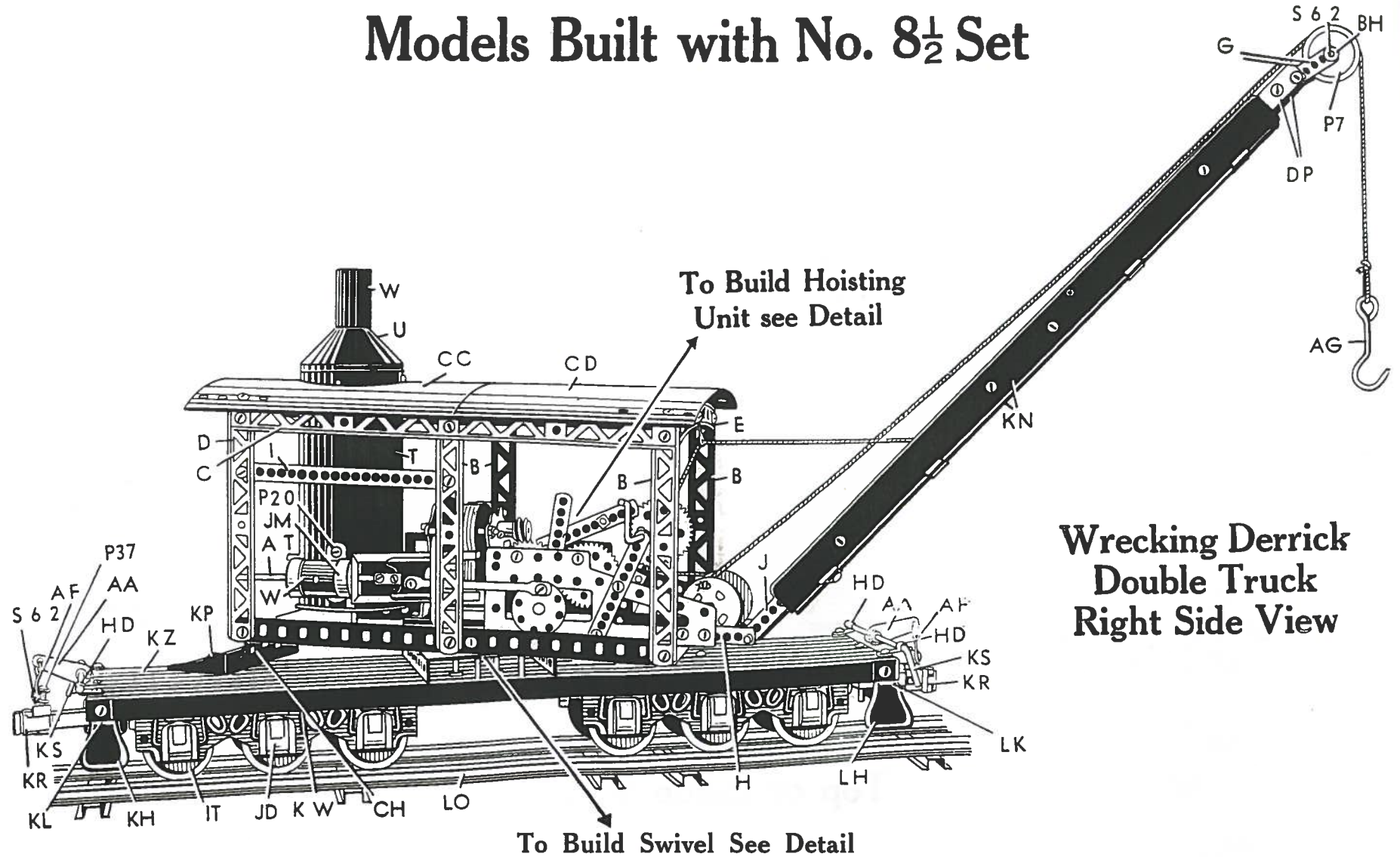


Models Built with No. 8½ Set



Gondola Coal Car
Top or inside View

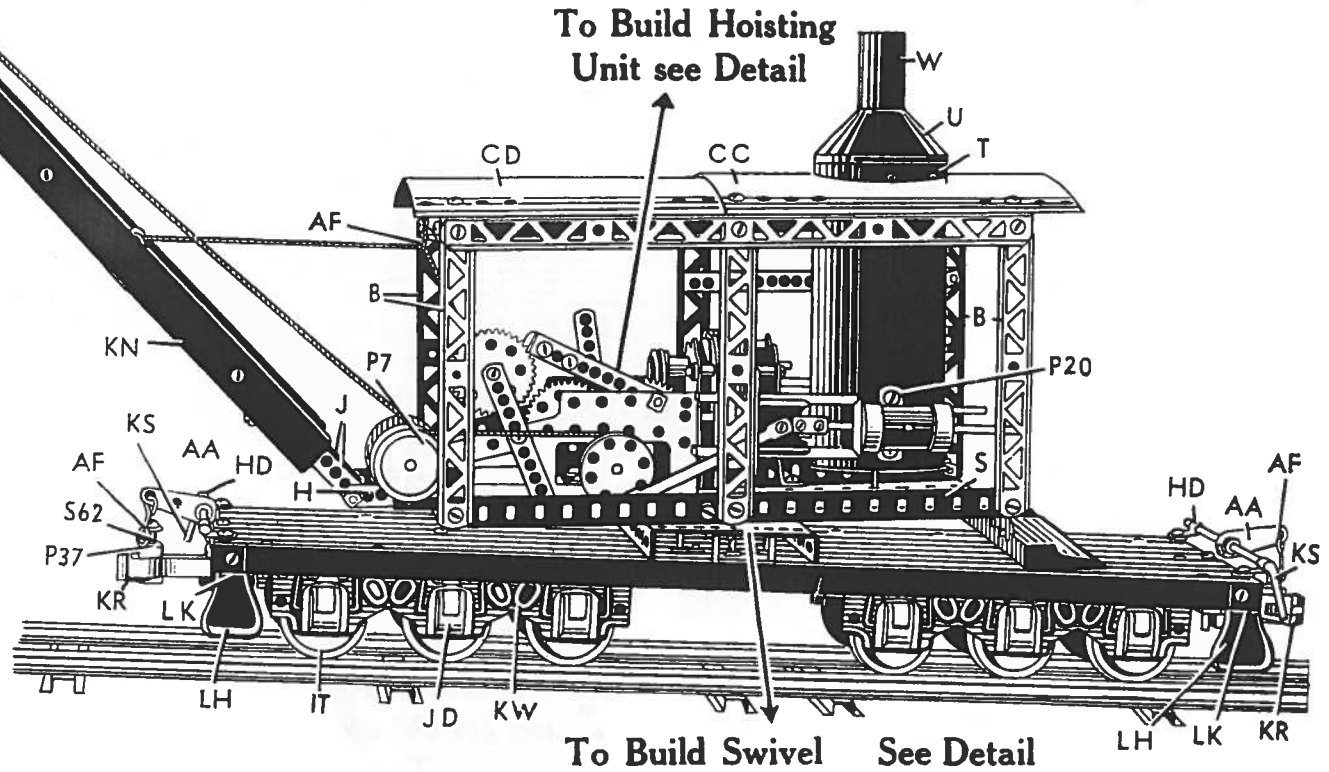
Models Built with No. 8½ Set



Models Built with No. 8½ Set

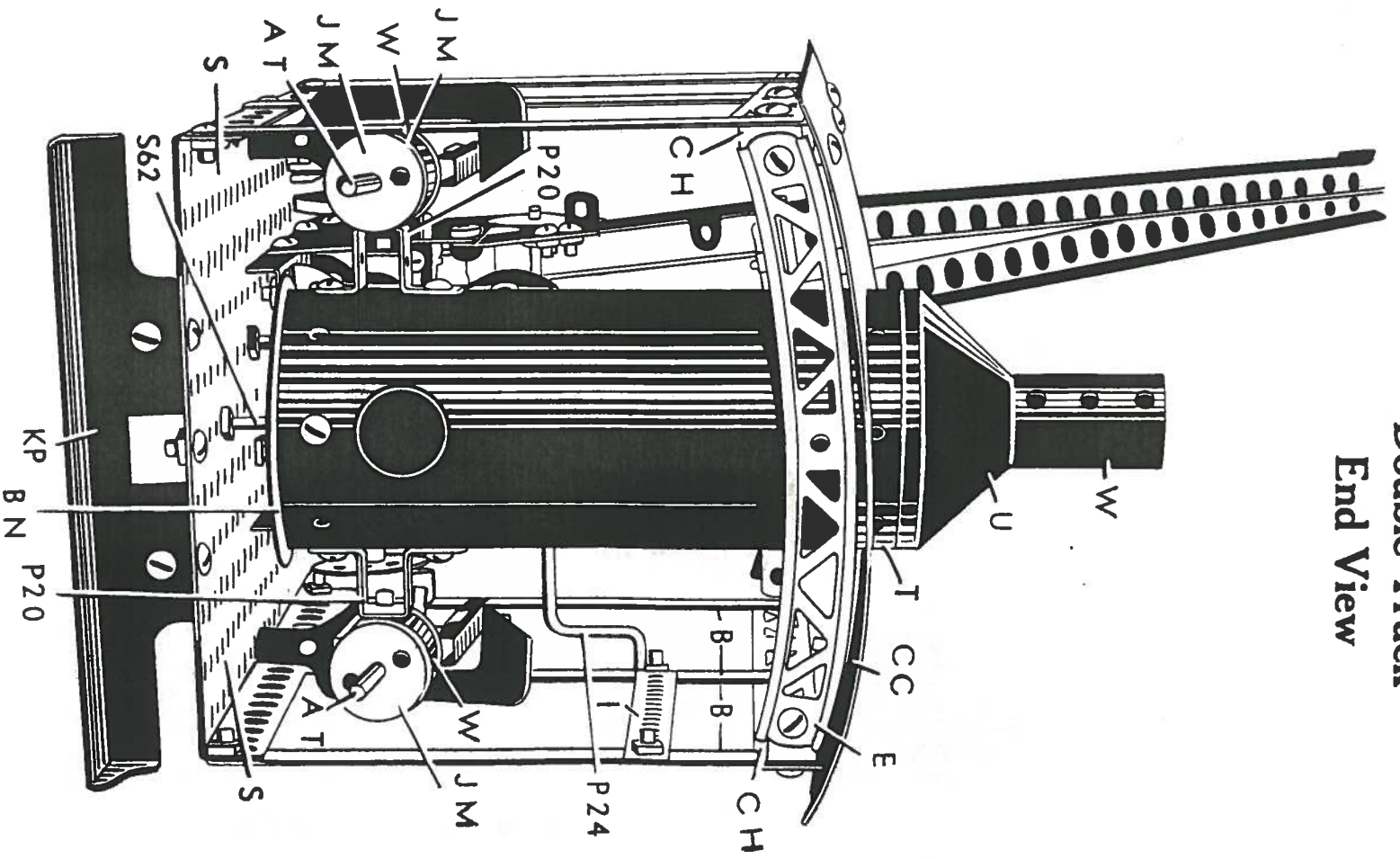


**Wrecking Derrick
Double Truck
Left Side View**

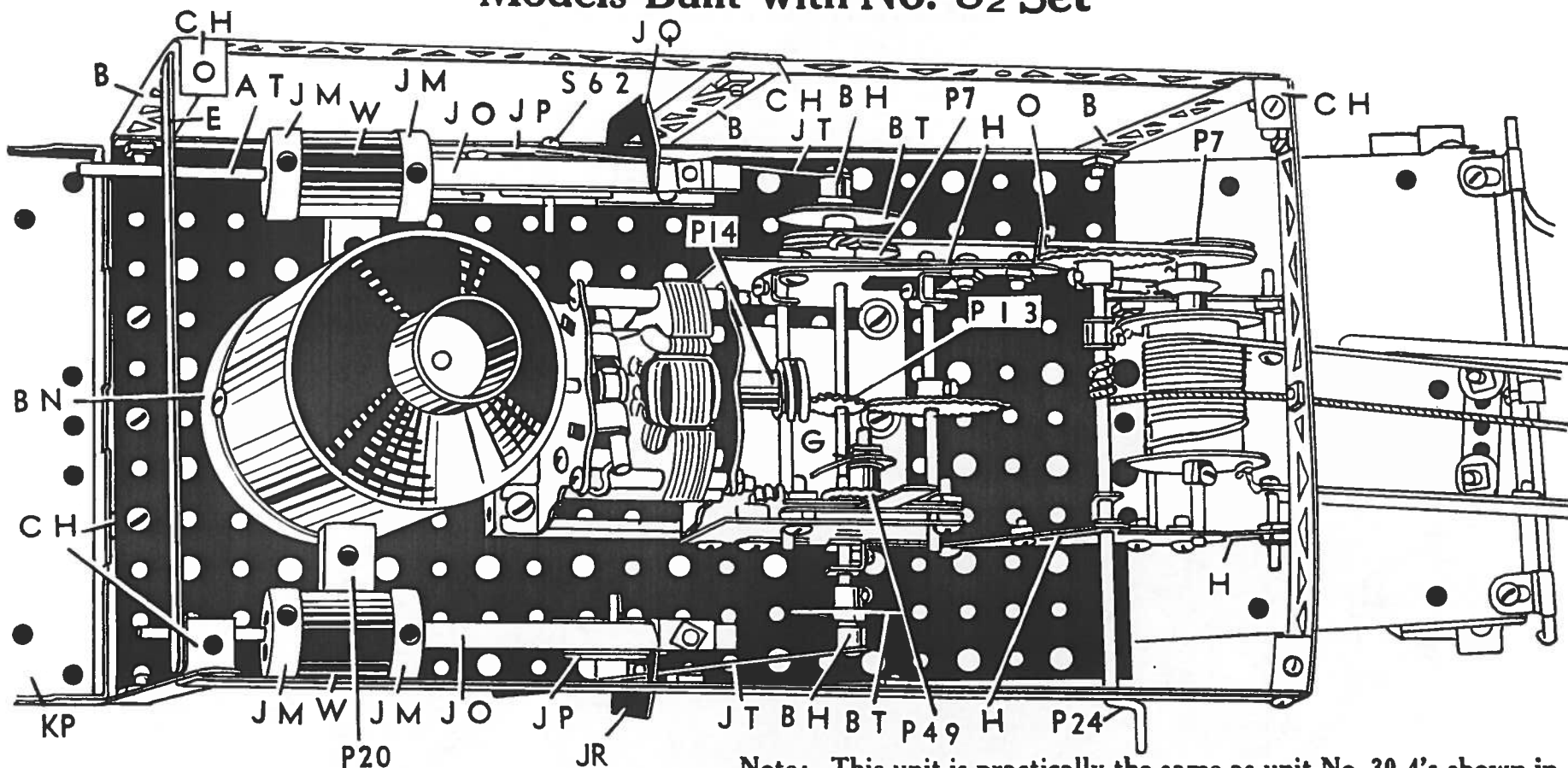


MODELS BUILT WITH No. 8½ Set

Wrecking Derrick
Double Truck
End View



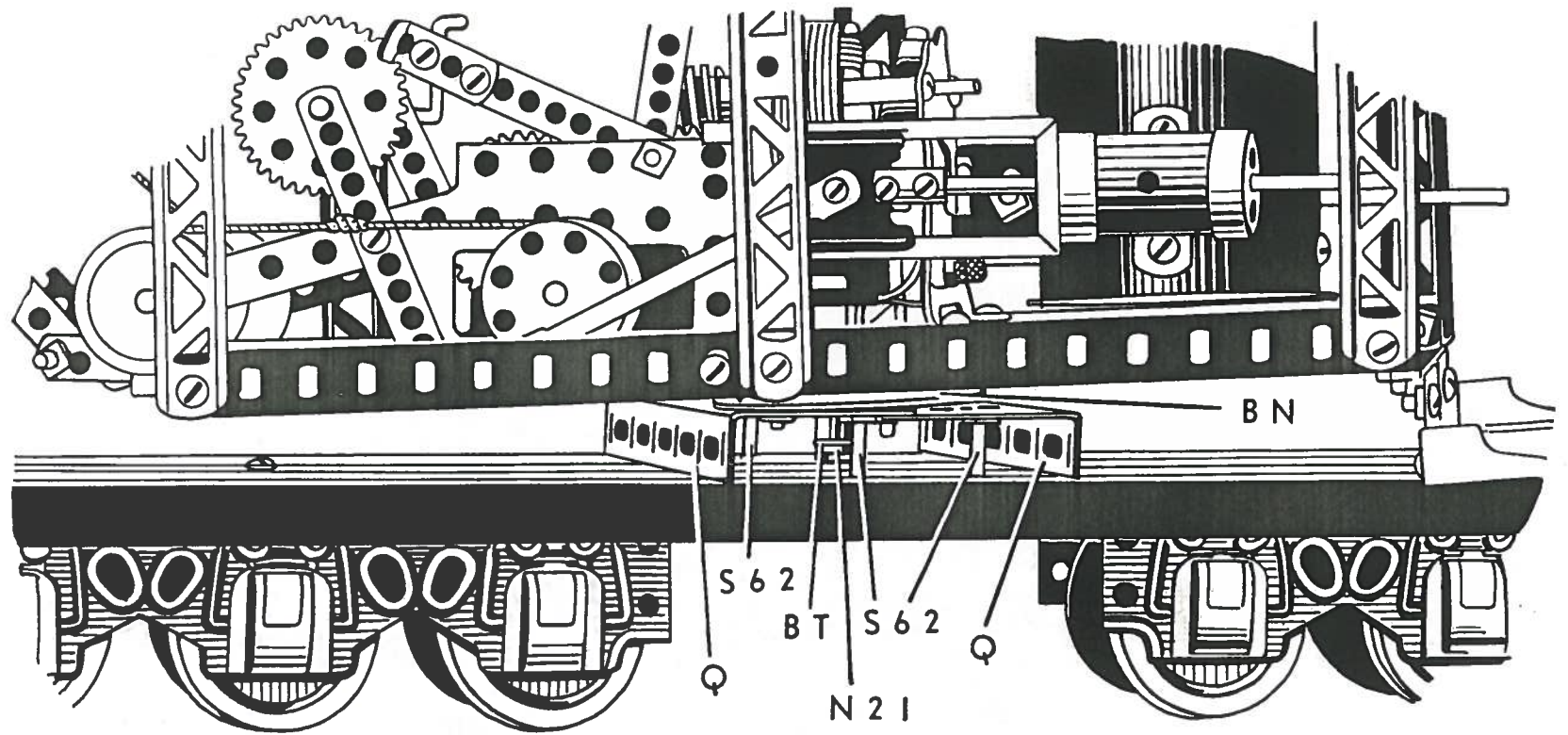
Models Built with No. 8½ Set



Wrecking Derrick – Double Truck Detail of Hoisting Unit

Note: This unit is practically the same as unit No. 30-4's shown in standard gear box combinations illustrated in Section of Models Built with No. 4 Erector. Additional parts necessary are included in No. 8½ Set.

MODELS BUILT WITH No. 8½ Set



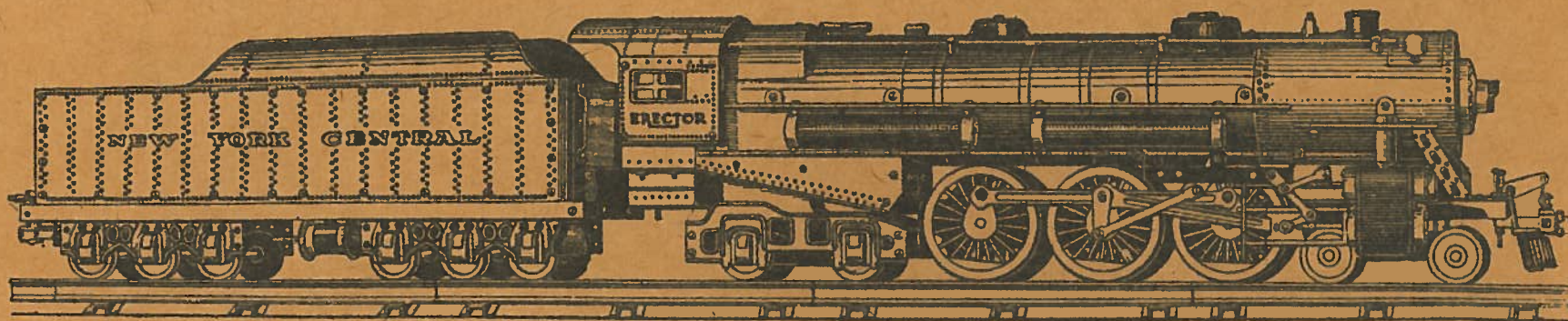
Wrecking Derrick - Double
Truck -- Detail of Swivel

ERECTOR

REG. U.S. PAT. OFF.

LOCOMOTIVE SETS

The creation of, and the addition to Erector, of over a hundred absolutely new engineering parts and exclusive Erector features, makes possible building and reproducing entirely new types of engineering models, such as exact replicas of a New York Central steam locomotive over four feet long, wrecking derricks, portable steam plants, industrial locomotives, mill steam plants, pumping stations, compressing machinery, and innumerable and countless others, all electrified for motion, action and thrills.



No. 8 ½ Erector Set builds the Locomotive and Tender over four feet long as illustrated above and 405 other models.

No. 8 Erector builds the Locomotive without Tender and 398 other models.

No. A Erector builds the Locomotive without Tender and 12 other engine type models.



Hello boys!
FERRIS WHEEL
Built from
No. B ERECTOR

The Ferris Wheel pictured herewith is built out of the B Erector Accessory Set. It stands 3 ft. 3½ in. high, circle is 2 ft. 11 in. in diameter. If you now own a regular Erector Set, the B Set will build this Ferris Wheel and many other interesting models out of the big channel straight and curved girders. There are over 100 big girders in this set. If you do not own a regular Erector Set, the B Accessory Set is a complete set in itself, and will entertain you for days. There is no motor packed in this set. If you own a regular Erector Set, use the motor you have. If you do not own an Erector Set, you can give action to the models you build by securing the famous Polar Cub 110 volt motor, P56G, that operates on any house current. For those who do not have 110 volt current, the P58 standard Erector motor will operate the models in this set.

A.C. Gilbert
President,

