## NO NUTS - NO BOLTS - NO SCREWS - NO LIMIT





# ARKIRECTO 3.

THE LATEST AND CREATEST CONSTRUCTIONAL TOY

## INTRODUCING ARKIRECTO

In introducing ARKIRECTO we cannot over-estimate the significance of its importance, not only in Toyland, but also from the standpoint of educational architecture and mechanical construction.

Although it is primarily a toy for Boys and Girls of all ages, it readily becomes the pastime of grown-up people.

ARKIRECTO ceases to be a mere toy after the structure has been built; it instantly becomes a miniature model of some large building already in existence, or a faithful reproduction of some great engineering feat, or again the model of an edifice not yet built.

But ARKIRECTO need not be built from models once one has the simple principles of construction in mind. Every boy and girl can erect structures from his or her imagination. Very often a boy or girl possesses a talent for architecture, designing or construction, but has never had the opportunity to display that talent. ARKIRECTO affords this opportunity, and many children will be indebted for their future career to the ingenuity and simplicity of ARKIRECTO.

Interchangeable parts of identical dimensions will be obtainable all over the world.

Here is something new, educational, instructive, interesting, interchangeable, international, inexpensive, progressive, indestructible, useful and practical.

WITH

NO NUTS

NO BOLTS

NO SCREWS

NO LIMIT

TO WHAT YOU CAN BUILD!

AND ALL BRITISH!

PERFECT WORKMANSHIP

STANDARDISED PARTS

ARKIRECTO LTD.

Telegrams: ARKIRECTO PICCY LONDON.

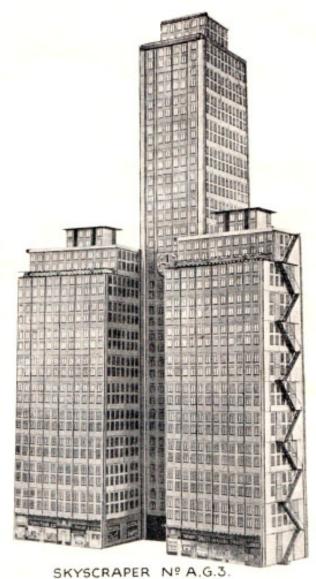
Cables: ARKIRECTO LONDON.

CARLTON HOUSE REGENT STREET LONDON, S.W. 1. Telephone: WHITEHALL 6091.
(Two Lines)

## LOOK AT THESE!







The state of the s

THREE MODELS WHICH GIVE SOME IDEA OF THE LIMITLESS SCOPE OF

ARKIRECTO

## ARKIRECTO

PATENTS PENDING IN ALL COUNTRIES.

#### THE MOST FASCINATING AND INSTRUCTIVE TOY IN THE WORLD.

The ARKIRECTO System is composed of less than 90 pieces made of steel, each one of which has a specific purpose. These parts combine to form a complete miniature building and engineering system with which practically any model can be constructed. The unique feature of ARKIRECTO is that it contains NO NUTS, NO SCREWS and NO BOLTS. Imagine, therefore, how simple it is both to build a model, AND TO TAKE IT TO PIECES. No tedious screwing and unscrewing, no bolts and nuts to lose AND HAVE TO REPLACE. And yet, because of the genius in the parts and the rigidity of the finished article, the most beautiful and practical models can be built.

#### CONSTRUCTING WITH ARKIRECTO.

Make the simple models first and then improve upon them. Every model can be made in many different ways, and hundreds of designs not shown in this catalogue can easily be built with a little imagination. ARKIRECTO is the only toy in the world with which you can build anything from a skyscraper to a roundabout.

#### SUPPLEMENTING YOUR OUTFIT.

ARKIRECTO is sold in 11 separate outfits, numbered M.1 to A.M.2. ALL ARKIRECTO PARTS ARE OF THE SAME HIGH QUALITY AND FINISH, but the larger outfits contain a greater quantity and variety of parts making possible the construction of more elaborate models. As it is simple and inexpensive to buy separately any ARKIRECTO parts or an ARKIRECTO X outfit, it is obvious that any one outfit can be converted into a higher numbered one.

#### SERVICE.

The service of ARKIRECTO does not end with selling an outfit and an instructional catalogue. When you are confronted with any problem in model construction, write to us about it. We want you to learn the infinite possibilities of this toy which is more than a toy. By filling up and returning to us the application form which is enclosed with every outfit, you become a member of the ARKIRECTO Club, which entitles you to be kept in touch with the latest information relating to ARKIRECTO construction, the dealers from whom extra parts can be obtained, and a badge of membership (See inside back cover).

THE TOY BUILDS THE BOY WHILE THE BOY BUILDS THE TOY.

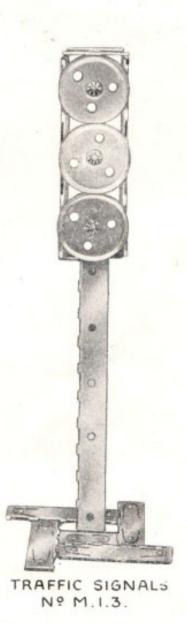
## ARKIRECTO OUTFIT No. M.1.

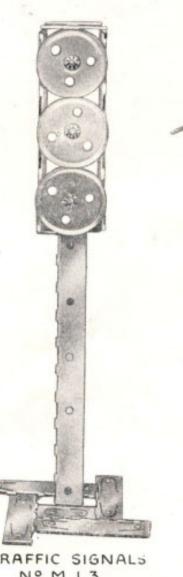
#### OUTFIT No. M.1.

This mechanical outfit contains over 40 pieces and an instructional catalogue showing a few of the countless models that can be built. Price 2/6.

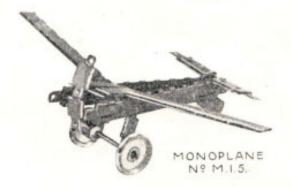






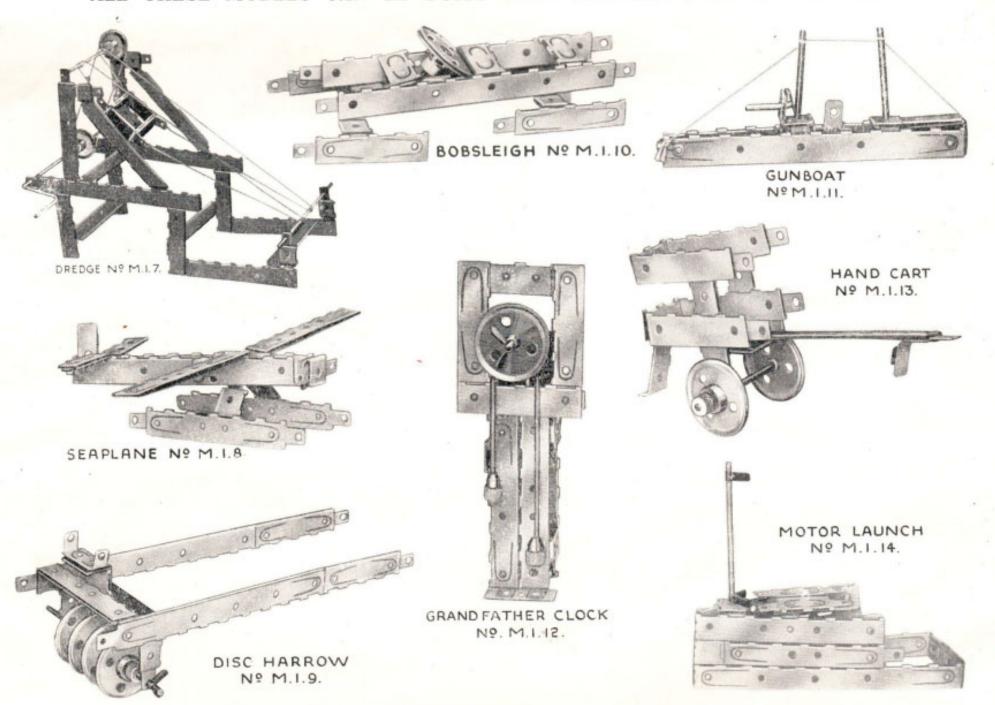






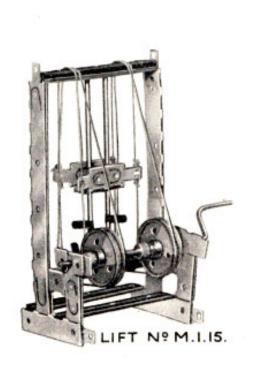


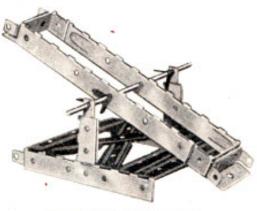
## ALL THESE MODELS CAN BE BUILT WITH ARKIRECTO OUTFIT No. M.1.



Page Four

## ALL THESE MODELS CAN BE BUILT WITH ARKIRECTO OUTFIT No. M.1.





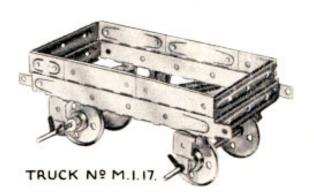
SEE SAW Nº M.I.I6.

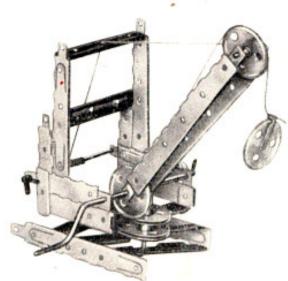


SCALES Nº M.1.19



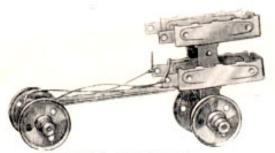
SIGNALS Nº M.I.20





SWIVELLING CRANE Nº M.I.18.

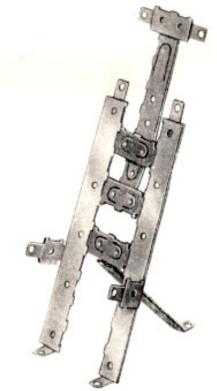
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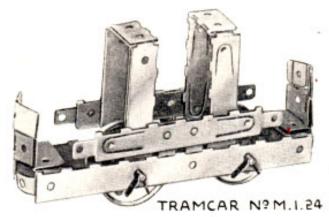
BUILDERS TRUCK

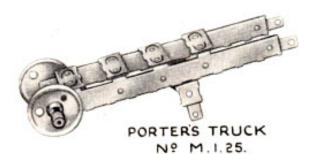
Nº M.1.22.

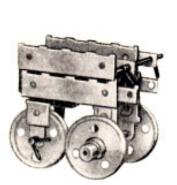
COASTER Nº M.I.21.



EASEL Nº M.1.23







MILK BARROW Nº M.I.26



CATAPULT Nº M.I.27.



4 WHEEL SCOOTER Nº M.I.28.



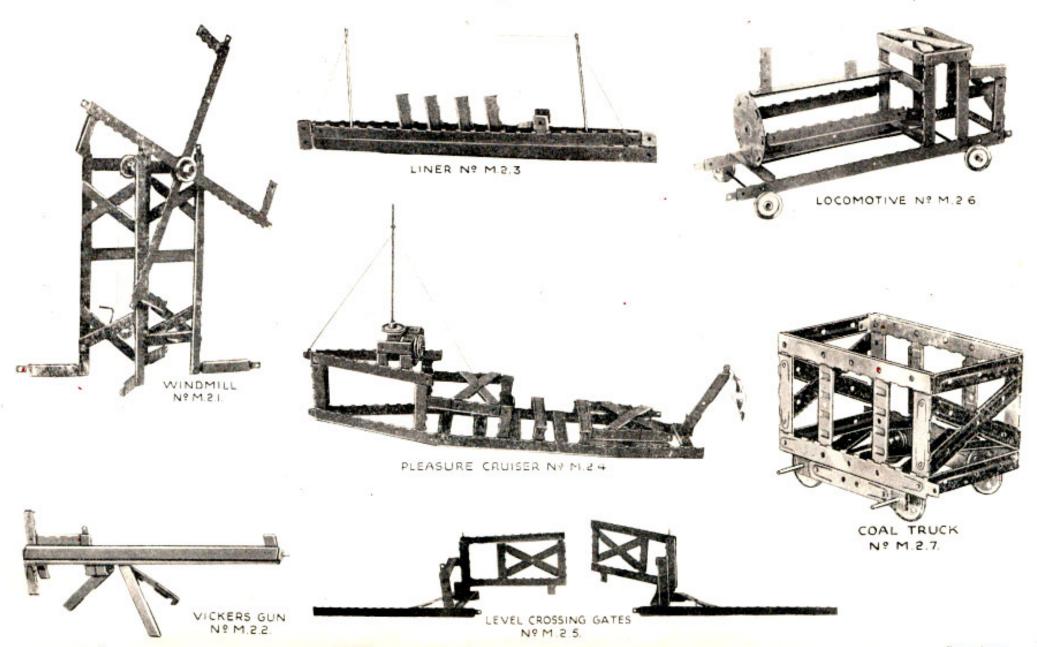
SWING Nº M.1.29.

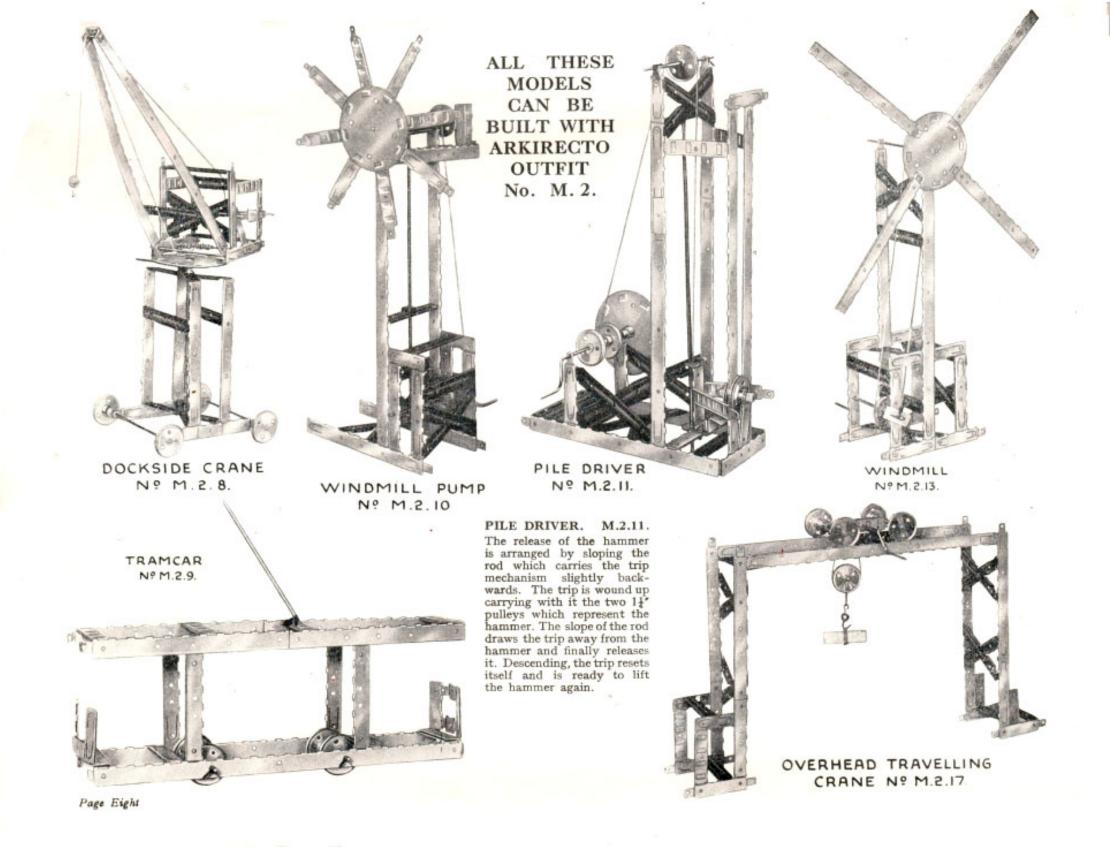
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## ARKIRECTO OUTFIT No. M.2.

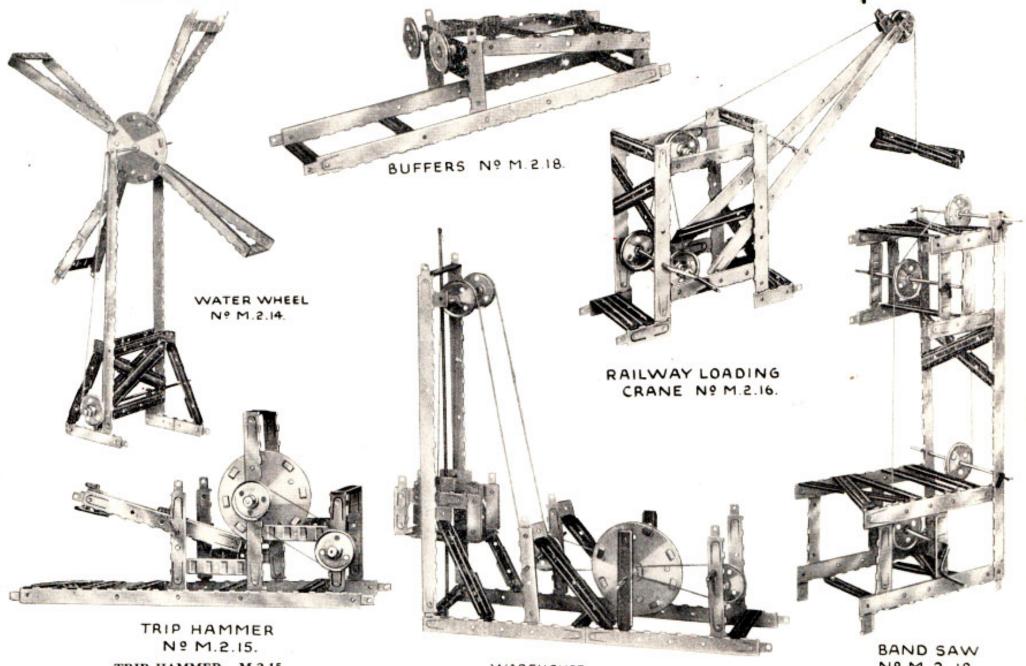
OUTFIT No. M.2.—This is an excellent mechanical outfit with which to begin an ARKIRECTO career. It contains over 65 assorted pieces with which numerous models may be built.

Price 5/-.





## ALL THESE MODELS CAN BE BUILT WITH ARKIRECTO OUTFIT No. M.2.



TRIP HAMMER. M.2.15.

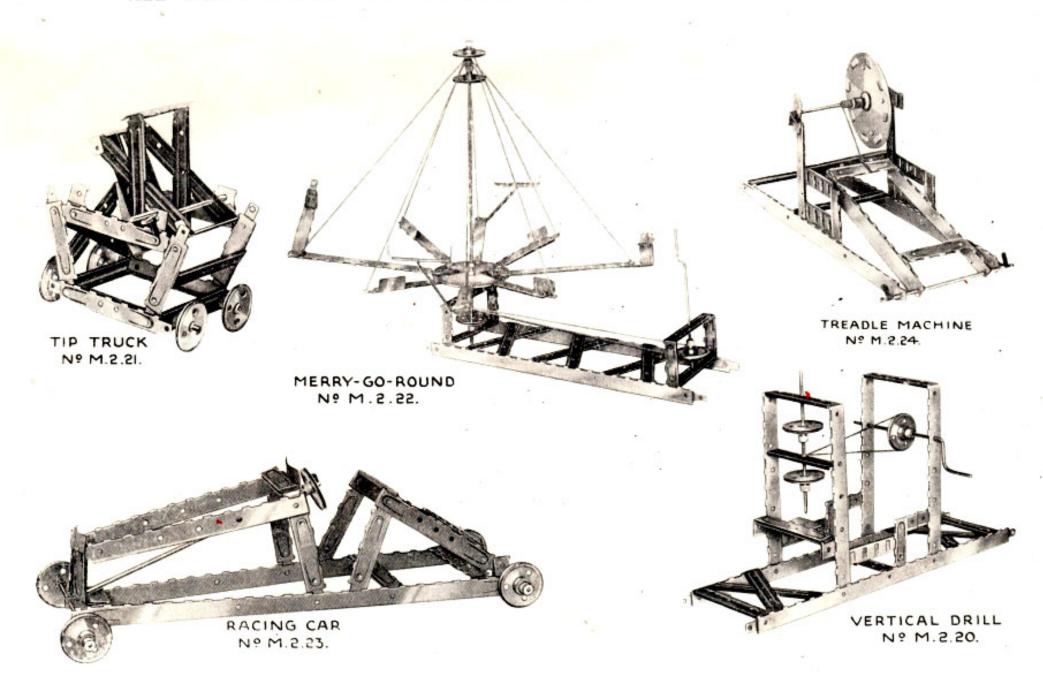
The hammer is operated by a trip consisting of a G.14 fitted into the 8-burst wheel.

WAREHOUSE LIFT Nº M.2.12.

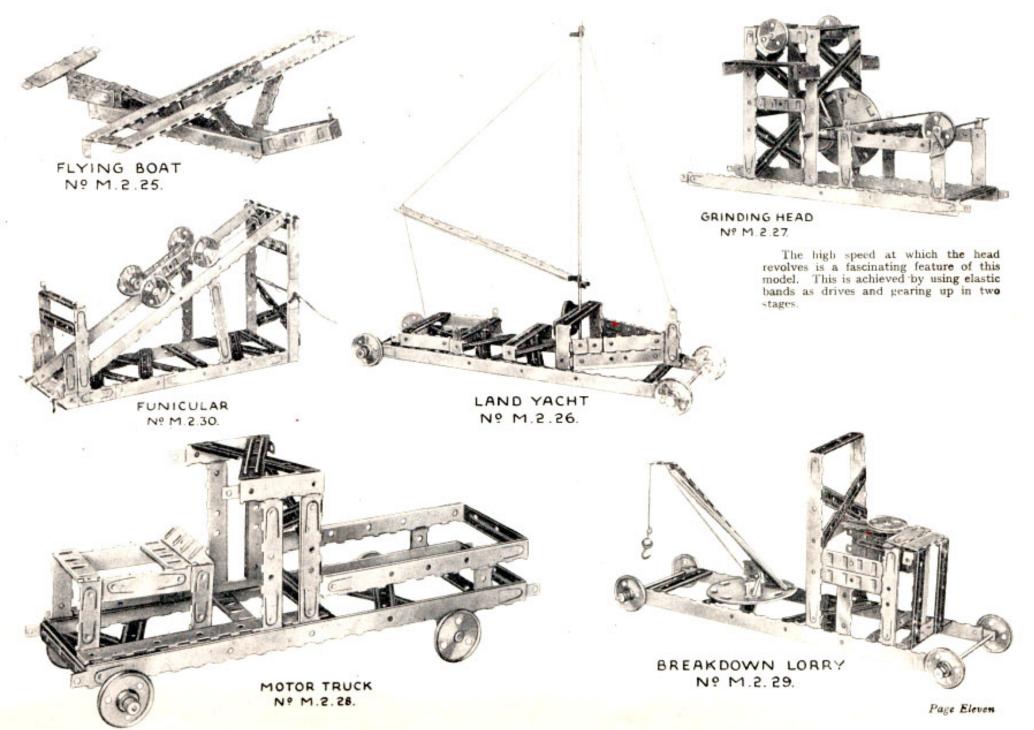
Nº M.2.19.

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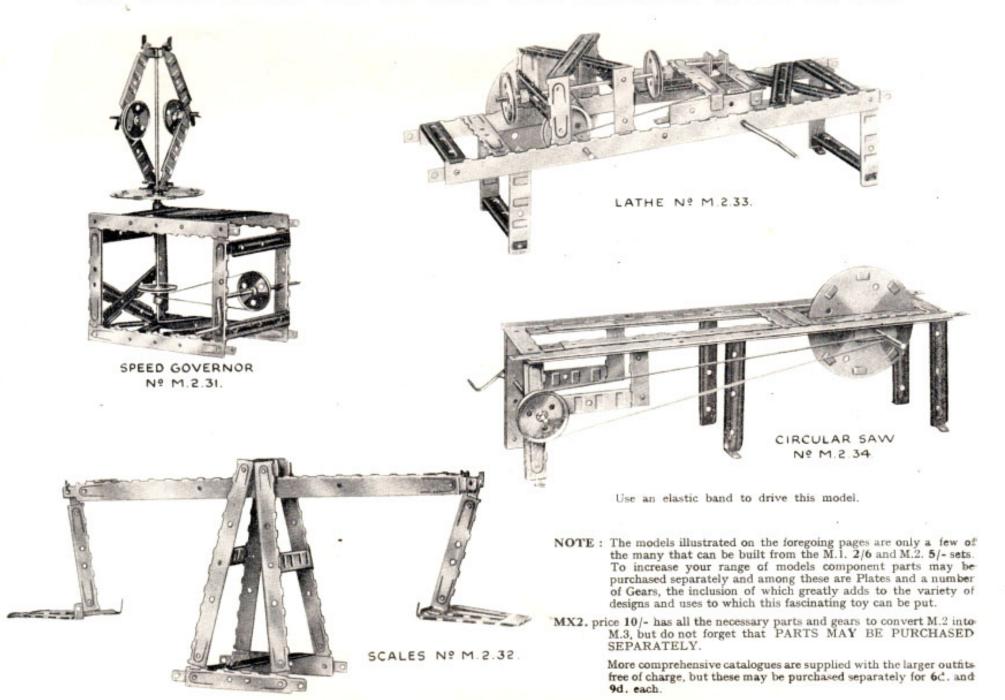
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#### ALL THESE MODELS CAN BE BUILT WITH ARKIRECTO OUTFIT No. M:2.

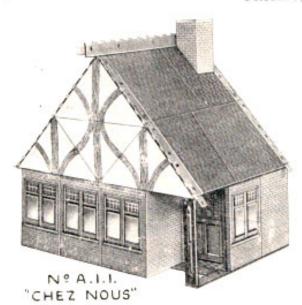


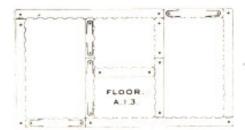
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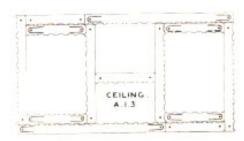


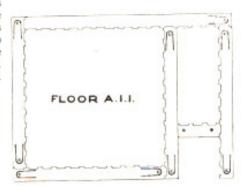
## ARKIRECTO OUTFIT No. A.1

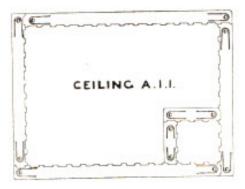
This is an architectural outfit designed specially for the building of houses, shops and other edifices. It contains 92 pieces and provides an excellent starting basis for the young architect. The framework of the buildings is constructed with the same ARKIRECTO parts that go to make up the Mechanical outfits, thus making possible the construction of a variety of mechanical models also. PRICE 7/6.

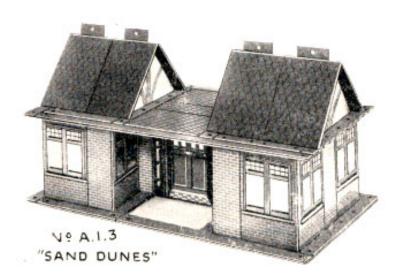




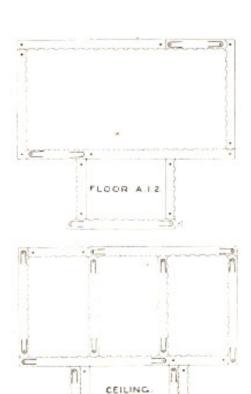












A.1.2.

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## GENERAL PRINCIPLES OF CONSTRUCTION

The material used in ARKIRECTO is such that if properly handled the toy will last indefinitely and for this reason the following instructions should be adhered to.

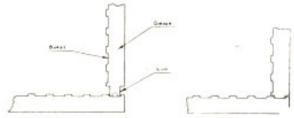
GIRDERS. These varying in length from \( \frac{1}{2} \) consist of a folded strip of metal with one or two lugs. Castellated on one side and fully open on the other they are designed to allow for construction in all directions.

When joining the girders together, hold each part firmly and close to the point of contact. (See figs. 1, 2 and 3).



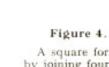
Figure 1.

The fitting together of two girders in a straight line. The drawing shows the lug of one girder about to slip into the end of the other, where it becomes firmly fixed by means of a spring tongue. Girders are burst on all four sides to allow construction in different directions.

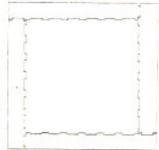


Figures 2 and 3.

Fitting two girders at right angles. The lug is shown just before it is pressed into the slot. The operation is completed in Fig. 3.



A square formed by joining four 3½" girders at right angles. This illustrates how the base of any structure can be formed.



If the connection is inclined to be stiff do not use force but work the part with the lug gently, using a backward and forward movement.



Figure 5.

To obtain an angle without using a joiner, fit two parts together, as described above, then, holding the girders close to the point of connection, slowly bend until the required angle is obtained. To straighten out again, carefully reverse the action. Girders should not be bent anywhere other than at the lug. (See Fig. 5).

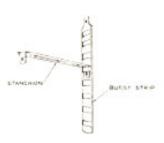


Figure 6.

BURST STRIPS. The burst strip allows for variety in construction and can be curved to suit requirements and without fear of distortion.

When inserting a lug into a burst, bend the lug slightly when it is half way in. A slight pressure will then force the lug right home. (See Fig. 6).

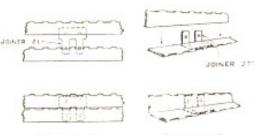


Figure 7.

Figure 8.

JOINERS. A variety of Joiners is supplied to enable the builder to join two parts at any selected spot and to obtain a required alteration in angles or planes. Figs. 7 and 8 illustrate but two of the many uses for Joiners.

## GENERAL PRINCIPLES OF CONSTRUCTION



Figure 9

A method of strengthening the joint of two girders. A joiner (J.2) is seen just before its lugs are thrust home into the bursts of the two girders.



Figure 10

By using the piece known as the joiner two girders can be set at any angle to one another. Above is shown two girders joined at an angle of 60 degrees.



Figure 11

To join two lugged ends together. See that the tongue of one girder is towards you and the tongue of the other away. The castellated slots of both girders should be pointing in the same direction. (See Fig. 11).



Figure 12

STANCHIONS. Stanchions are used for strengthening the framework of all structures, and, being drilled at 1" intervals, will be found useful as bearings for working models. The stanchions are also used for Architectural purposes.

CROSS PIECES: The uses for the Cross Pieces for Mechanical Sets are similar to those of stanchions, but give an extra strong cross brace. They are drilled at 1" intervals for the reason given above under "Stanchions." C.1 being concave

should be fitted first to allow



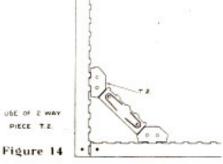
Figure 13

- C.2 which is convex, to fit snugly against it. (See Fig. 13).



USE OF E WAY

PIECE T.Z.



USE OF 3-WAY PIECE TI



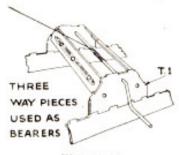


Figure 16

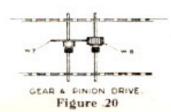
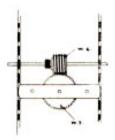




Figure 17

ARKIRECTO wheels are fitted with a brass boss to take a tapered collet. When the position of the wheel on the axle has been determined, this collet is screwed into the boss as in Figure 17, thus positioning and fixing the wheel securely on the axle.

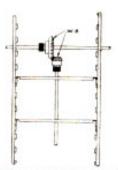
> NOTE. - Do not fit the collet in tightly, except when fixing to shaft.



WORM DRIVE Figure 18



6 PLATE Figure 21



CROWN & BEVEL DRIVE

#### Figure 19

Do not use centre hole of plate as bearing for gear drive as ARKIREC-TO gears are made to mesh at 1" centres.

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## PRINCIPLES OF ARCHITECTURAL CONSTRUCTION

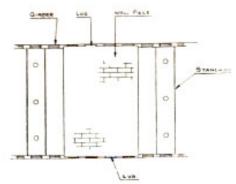


Figure 22

A section of wall showing a wall piece in position on a framework joined by two girders and two stanchions.

ROOFING. For the building of large pitched roofs, gable end pieces are used. From the illustrations it will be seen that these pieces can be put together to form a gable end of any size. The construction of the frame to receive these pieces being almost exclusively of 3" girders (G.8) and joiners (J.2) see Figs. 24 and 25.

These frames are joined together by a girder at every 3" interval along the sloping sides thus forming a framework to receive the roof pieces.

The roof frame can either be built on to the top floor of the buildings or fixed on when complete with joiners.

Using this principle of construction it is possible to build up a pitched roof of any size.

Where necessary, the girder construction of the frames of the various floors of the buildings illustrated is shown; these are connected together with stanchions, floor upon floor until a complete framework of the building is erected. (See Fig. 22). Great care must be taken in this stage to

Figure 26

see that the stanchion lug enters the correct slot and that each frame is squarely above the one beneath, that all edges are perpendicular and that all floors are horizontal.

This skeleton is filled in with the metal plaques representing windows, walls, etc. These are fitted with lugs, which it should be noted enable the piece to be fitted in either side of the girder. When fitting plaques on the inside of the skeleton framework, as in the Swiss Chalet, A.2 Outfit, the Road House, A.3. Outfit, etc., the lugs are bent through 180 degrees. (See Fig. 23).

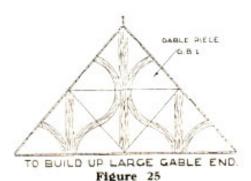


Figure 23

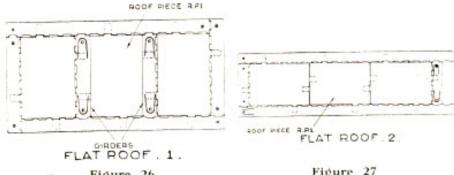
The 3"×2" wall and roof pieces made with 4 lugs as above. These lugs fit into the bursts of the girders, which go to make the framework of the building

27.

FOR GABLE END Figure 24



FLAT ROOFS are less complicated. They are usually built into the ceiling frames using roof pieces with the lugs beat flat, as in "Inglenook" (A.2 outfit) The Flats (A.4 outfit), etc., see illustrations. For two simple types of flat roof, see Figs. 26 and



Included in every outfit are a number of cornice pieces the skilful use of which will add greatly to the appearance of the finished building

Page Sixteen

## GENERAL NOTES.

#### READ THESE CAREFULLY.

See that all lugs are in the right slots and right home in those slots.

Make sure that the right length girder is used. A rule will be found on the Component parts page.

Where a spindle is used through two girders see that holes in girders are opposite. Use the slots in preference to the open edge wherever possible as this makes a more rigid connection.

All spindles should be positioned by spring clips, bosses and collets or wheels.

If necessary use pliers to tighten collets.

Make free use of washers, particularly in conjunction with clips.

Where a joint is made in a length of burst strip under tension, bend the tips of the lugs slightly to prevent them pulling out.

Use a slip or "R" knot to attach string to spindles.

Where a positive drive is needed, use a pinion and tie the string round the collet and thence over one tooth of the pinion.

Take great care when inserting two lugs in one slot to work them in gently and avoid bending lugs.

Collets will be found useful as distance pieces

Where plates or girders swivel together, space them with washers.

Check up at each stage of your building, paying particular attention to correct positions and distances.

Do not attempt to bend lugs by hand. (See Fig. 5 and explanation).

Never grip a spindle with a pair of pliers.

Do not screw a collet right home into a boss unless on a spindle.

Make use of the Hammer (H.1.) to tap pieces apart as well as to tap them home.

## MAKE YOUR OWN RAILWAY LINES.

#### A Complete ARKIRECTO System.

In addition to being able to erect stations, signal boxes, tunnels, etc., you will even make your own railway lines with ARKIRECTO. This is very simply done by using 11½" Girders (G.1), the sleepers specially provided and lengths of steel rail which will be supplied by ARKIRECTO LTD at an extremely small cost. An illustrated folder is being published. This will show Parts for making curves and points which will enable the builder to erect a complete and realistic railway system, and a perfect permanent way upon which a train will run silently and securely. With no other toy in the world are you able to build such a magnificent or such a practical representation of the real thing.

## COMPONENT PARTS

#### PRICE OF ARKIRECTO PARTS.

	KEY			Part G.1 11½" Girder	Price. 4d. each
G1. G2 G3. G4. G5. G6. G7 G8 G9. G10, G11 G		B. S.	A octobridge	G.2 112	4d 2d 1½d 1½d 1½d 1¼d 1¼d 1d 9d. per doz. 9d 9d 6d
6" Plate	T1. T2	SI. S. DAMESTINE	Sloepen	J.1 Joiner	6d 7d 10d 1d. each 1d 1d 1d
J.I. J.2.	J.6. J.7	J8 J.9	J.10. J.11.	B.1 6' Burst	1d 1d 9d. per doz 1d. each 1d
5"Cranked Spindle.  I"Spindle  4'2" Spindle	P	15. 7'z". 12" Spindle	Spindle.	Sleeper 3*  6* Plate  Sp.1 12* Spindle  Sp.2 71*  Sp.3 41*  Sp.4 1*  Sp.5 51* Cranked Spindle	1d 1d 9d. per doz 6d 2d 1d. each
USE THIS MEASURE	TO CHECK LEN	GTH OF PARTS.		Service Spinish Spinish 11	

EIGHTHS	1	, 21	, 31	4	5	6	7	[3]	9

## COMPONENT PARTS

#### PRICE OF ARKIRECTO PARTS.

P.O.1

Porch ... .. 1d. ,,

1.161	CE OF ARRIVECTO	ARIS.				
Part.		Price.				
W.1	2%" Burst Wheel	5∮d, each				+
W.2	3" Circular Plate				KEY	
W.3	11" Fixed Wheel				10.6.1	
W.4	14" Loose			Services.		
W.5	Crown Wheel		6 00	100		
W.5A	Bevel Gear	4d	10		/% /mm	0 0 0 0 1
W.6	Worm	3 1 d	0		(A) (0) (III)	2 2 x
W.7	Gear Wheel	4d	0 9	9 W.3. W.4	W.5. W.5A W.6	W.7. W.8. W.9. WIO CH.I. C.L.I.
W.8	Pinion	4d		11.5. 11.4	VV.3. VV.3A VV.0	VV. /.
W.9	Boss	1d	W.I.	W.2.		
W.10	Collet	1d			CONTRACTOR OF THE PERSONS ASSESSMENT	
W.11	Washer	1d. per doz.		1	н	19
C.H.1	Crane Hook	1d, each	ALCO ALCO ALCO ALCO ALCO ALCO ALCO ALCO	-	2	
C.L.1	Clip	3d. per doz.		See 1	798	98000000 5500
H.1	Hammer	1d. each				
W.P.1	3"×2" Wall Piece	1/2 per doz.	200000000			_5556555
W.P.2	3*×1"	9d				
WIN.I	3"×2" Window Piece	1/3 ,.		arrange automotive		
WIN.2	3"×1" " "	10d ,,	W.P.I	W.P.2. WIN.I	WIN.2.	R.P.1 * R.P.2.
R.P.1	3"×2" Roof	1/2		E-VIPER	1757	
R.P.2	3"×1"	9d	B	THEFT	1000	C.O.I.
G.B.1	Gable	1/	11/			the distance of the second
D.1	3"×2" Door	1/3	400	-		C.O.2
D.2	3°×1"	9d		200	NORTH MODELS	
C.P.1	Chimney Piece	1d. each	G.B.I.	D.I.	D.2. C.P.I	9.4
C.O.1	6" Cornice	1d	A			2
C.O.2	1" ,,	∮d. ,,	AGA.		(h	CHECK LL
			APPA	A		3080 BB
Z.1	Spire Piece	888 65	A332A	-		A STATE OF THE PARTY OF THE PAR
Z,C.1	Cap	₫d, each	Z.I	Z.C.1.	A.G.I.	R.A.I P.O.I.
A.G.1	Attic Gable	$2\frac{1}{2}d$				
R.A.1	Roof Angle	1½d				

## HOW TO INCREASE YOUR BUILDING RANGE

#### KEEP ADDING TO YOUR OUTFIT

The more ARKIRECTO parts or sets you have the bigger and better models you are able to build. By gradually collecting more of the pieces you will soon be able to build not only all the wonderful models illustrated in our catalogues, but others of which we have not even thought. The constructional possibilities of ARKIRECTO are therefore limitless.

Here is an alternative to buying separate parts. Should you prefer to convert an outfit right away into a higher numbered one, all you have to do is to ask your dealer or write to ARKIRECTO LTD, for one of our X outfits, a table of which is given below.

PRICES OF			Architectural.				PRICES	OF					CCESSORY		
ARKII	ARKIRECTO OUTFITS A		A.1				7/6			O	UT	FITS.			
	Mechan	ical.		A.2	٠.			15/-			M	ech	anical.		
M.1 -			2/6	A.3				30/-	M.X.2 con	verts	M.2	into	M.3		Price 10/-
M.2			5/-	A.4	• •			52/6	M.X.3	,,	M.3	,,	M.4		,, 10/-
M.3			15/-		_			$\neg$	M.X.4	,,	M.4	,,	M.5		,, 27/6
M.4			25/-	Т	HES	SE	PRIC	ES							
M.5			52/6	' A	RE	OPE	RATI	VE							
INGREAT					Architectural.										
Com	bined	Outfit	ts.	В	RI	TAIN	N Al	ND	A.X.1 con	verts	A.1 i	into	A.2		Price 7/6
A.M.1			30/-	N	0	RTF	I E R	N	A.X.2		A.2		A.3		,, 15/-
A.M.2			52/6	1	REL	AND	ON	LY.	A.X.3		A.3		A.4		,, 22/6

ARKIRECTO SUITS ALL POCKETS. Starting with 2/6 outfit, our PRICES FOR COMPONENTS enable you to increase your set gradually until it is as comprehensive as the most expensive outfit.

#### REMEMBER ALL PARTS ARE STANDARDISED.

Note.—In the catalogue which is included in every ARKIRECTO outfit there is an illustrated list of component parts with prices.

## ARKIRECTO CLUB

## QUALIFICATIONS FOR MEMBERSHIP.

All you have to do is fill in the application form which is enclosed with every ARKIRECTO outfit. When we have received this at Carlton House, Regent Street, together with a postal order for 6d. or 6d. stamps, we will send you the ARKIRECTO Badge which is a guarantee of future service in your interests, a comprehensive instructional catalogue (usual price 9d.) and, from time to time, all the latest information with regard to ARKIRECTO model making and any improvements evolved by our designers. So fill in the form, post it to us without a stamp and do not hesitate to write to the Secretary, The Arkirecto Club, Carlton House, Regent Street, S.W.I. whenever you have a problem or a query relating to model construction or the ARKIRECTO System generally. Our staff of builders and designers is at your service.

#### COMPETITIONS.

Every member of the ARKIRECTO Club, boy or girl, will have the chance to win substantial prizes in the competitions we shall inaugurate at various seasons in the year. These competitions will take the form of Model Construction both Architectural and Mechanical. Full details will be posted to Members in good time.

