AN UNABRIDGED CATALOGUE OF UNIQUE SCULPTURE COMPONENTS

2014

CATALOGUE OF ATTACHMENTS

James Capper employs the materials of mechanical engineering and the techniques of industrial design to develop the possibilities of sculpture and performance. His practice consists of three distinct but interrelated processes – preparatory drawings, sculpture and performance. Beginning with concept sketches, he designs and builds automotive machines that gouge, scratch and score the materials to which they are applied. They are both sculptures, and sculptural tools in performance.

These machines vary in size, from handheld power tools through mechanical diggers to gargantuan ships with knuckled legs that wade through shallow water. This is the second, expanded edition of a publication cataloguing the wide variety of attachments designed to be appended to the extremities of those larger machines. These are the teeth, the sharp protrusions that support the weight of each machine and leave marks in the landscape as it travels across it. The length, point and shape of each tooth, designed to suit specific ground conditions, determine the shape, depth and frequency of the marks it inscribes into the ground.

Ripper Teeth score marks through heavy ground conditions. The Ripper Teeth are cast out in front of the machine and sunk into the ground to secure a fixture. This allows the machine to pull itself forward much as a caterpillar does, dragging its weight across the ground. 'Tooth slip' describes the effect that occurs when the attachment loses its grip, skidding backwards and gouging into the earth to create a distinctive mark.

<u>Push Away Teeth</u> operate according to the opposite principle. Instead of being cast out in front of the

machine as a grappling hook to pull the machine along behind it, Push Away Teeth, as the name suggests, propel the engine across the terrain. They make an 'aggressive' mark when thrust into the ground, a 'tidy' one as they are pulled out of it. Seen as a cross-section, the effect is a zigzag pattern in the earth across which the machine has moved. These teeth are for use on 'skid plate' machines (which stand on skis) and 'permanent teeth propulsion' type machines (on which the attachments are permanently submerged in the earth).

<u>Deer Feet Teeth</u> are for softer earth conditions, when a wider and more rounded base is required to stop the teeth digging the machine into a hole and 'grounding out'. Their swollen shape means that they are the least aggressive of all the teeth in terms of their impact upon the land, creating shallow, smooth indentations. They work, like the Push Away Teeth, on 'permanent teeth propulsion' type machines like **Midi Marker** and 'skid plate' machines like **Exstenda Claw**.

Mountaineer Teeth are designed for attachment to machines that can negotiate steep slopes and hostile conditions. These 'stepping type machines' employ an exceptionally precise technique that can negotiate a wide variety of different surfaces, including rock, earth, sand, ice and concrete. The different shapes and dimensions of the teeth correspond to different ground conditions. Rock teeth are long, pointed and triangulated, while less intrusive teeth with broader bases are used for travel across roads and concrete.

Tread Pads are designed for attachment to the 'Offshore Division' of Capper's practice, which comprises machines that operate in water. Conceived as a solution to the problems associated with building pontoons, these ships are designed with four hydraulic knuckle boom cranes on their decks which allow them

to walk out into shallow water. Each of the legs ends in a flat, disc-shaped foot, a Tread Pad. The diameter of each Tread Pad corresponds to the ship to which it is to be attached, while the shape is determined by the underfoot conditions.

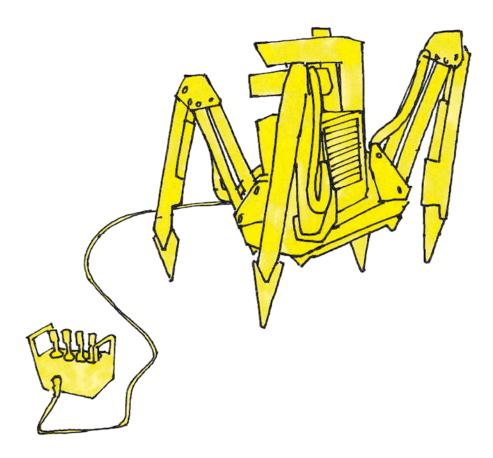
Shovel Type Teeth are fastened to traction machines such as Hydra Shuffle that operate by 'swimming' through rather than stepping across the surface of the ground, meaning that the teeth never leave the earth. Built to work through clay or soil, the shovel type teeth maximise the machine's traction and buoyancy. They scarify the ground in a fashion that recalls the abrasions left by dethatching machines.

Step Type Teeth belong to the same family as Mountaineer Teeth, but are much smaller in size. They fix to the prototype versions of earth-marking machines that, like Hydra Step, are able to step over obstacles. Suitable for use on rocky terrain, the teeth leave meticulously composed marks, reflecting the precision with which each leg of the machine delicately steps and positions itself.

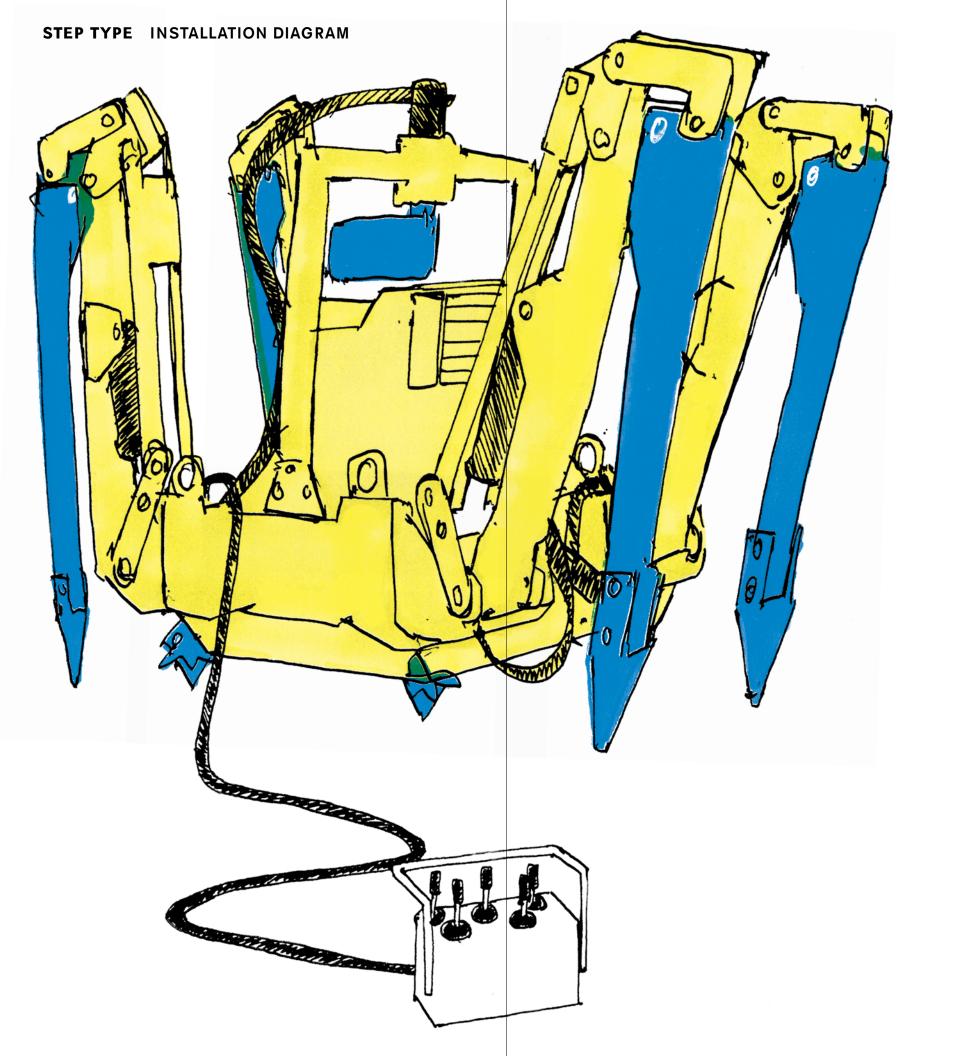
<u>Keys</u> are small, sharp teeth designed to negotiate icy landscapes. Tapping smartly into the top layer of ice, they make possible the quick, barbed steps with which the machine moves at high speed across frozen lakes and rivers. They leave pointed, skittering marks in the ice.

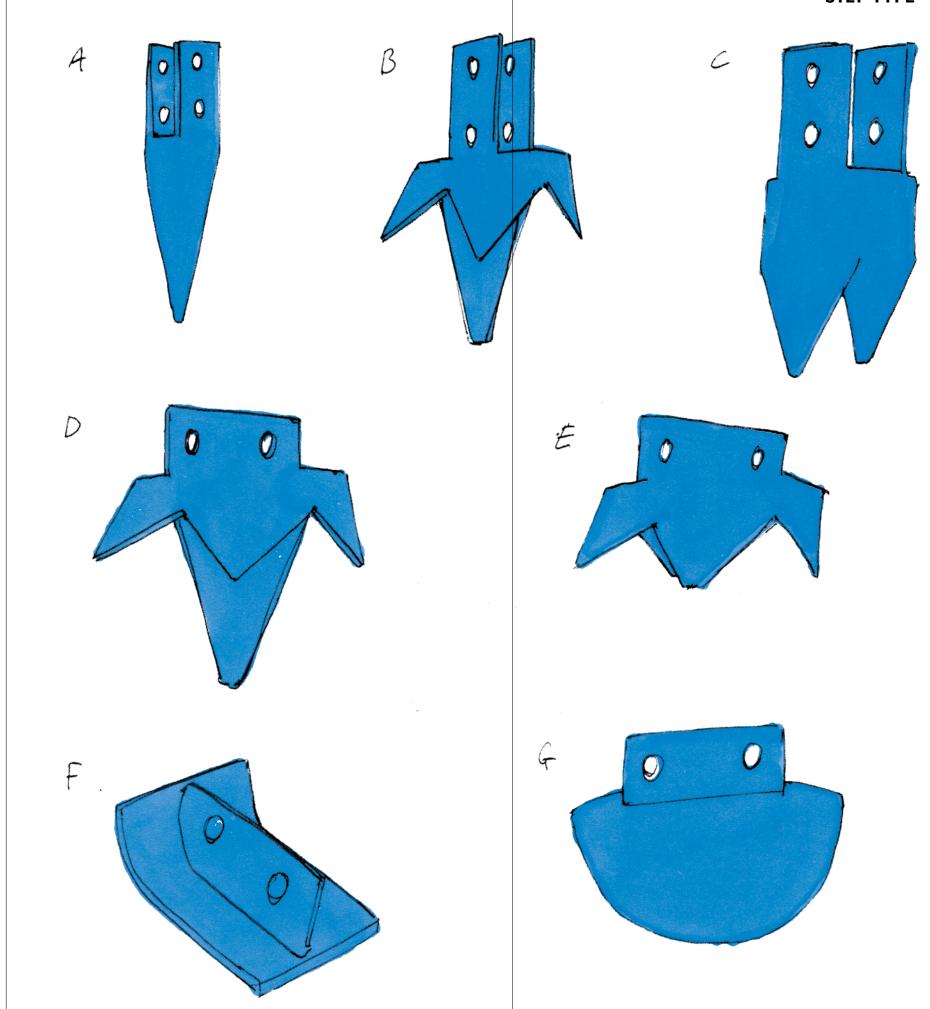
For Art Basel Hong Kong 2014 Hannah Barry presents two of James Capper's hydraulically-operated machines, Hydra Step and Hydra Shuffle. These mobile sculptures – one of them a four-legged 'mountaineer', the other a twin-armed automaton – are installed on plaster tracks, on which they move and mark under the artist's operation.

STEP TYPE









Hydra Step is in part inspired by a text by A. Morecki, in a compilation entitled 'Human and Machine Locomotion', describing a four-legged automaton built in 231 AD by the Chinese military commander Zhu Ge-Liang, for the purpose of transporting army supplies. Labelled an 'artificial cow', the machine's combination of mechanical and biological processes, a key component of Capper's research and design, resonated with the artist. Hydra Shuffle II operates according to the caterpillar's walking motion, anchoring itself using the terminal proleg and then reaching out with the forward, articulated proleg to pull itself along.

At regular intervals through the course of the fair the artist enters the booth to operate the mobile sculptures, which by the motion of their progress etch marks into the tracks on which they are installed. The different operations of the two machines are visible in their effects on the material, each track bearing traces of the artist's accumulated interventions.

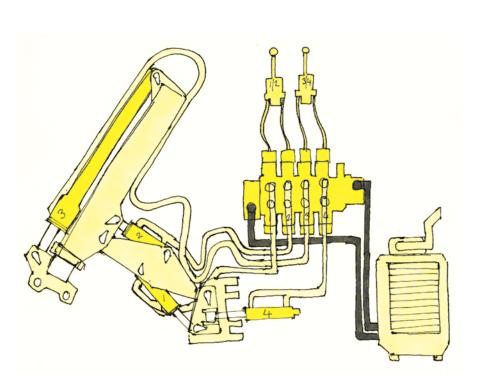
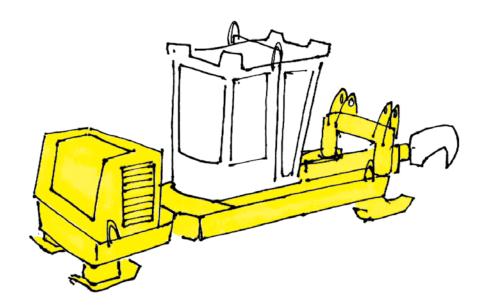
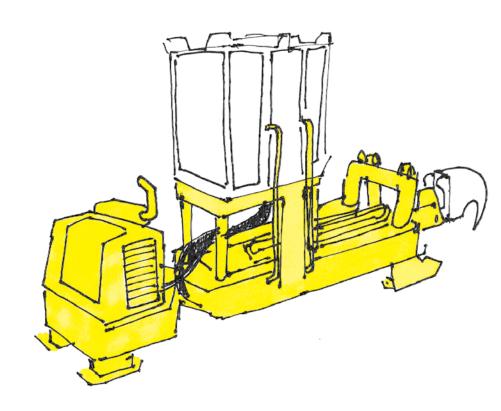


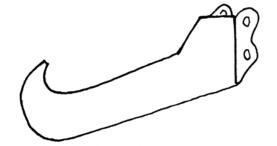
Diagram of Mountaineer's hydraulic system

RIPPER

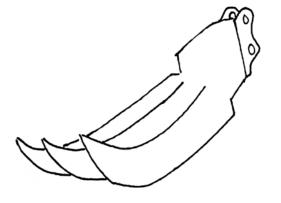




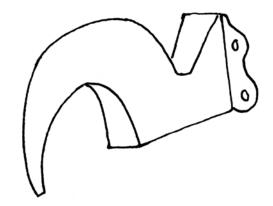
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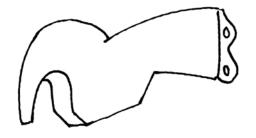
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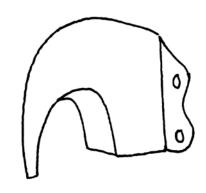
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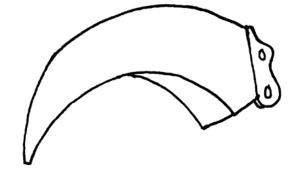
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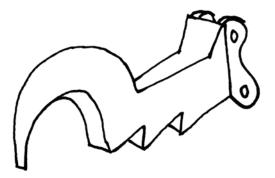
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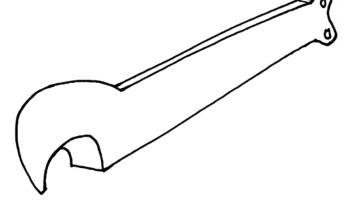
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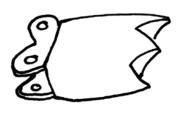
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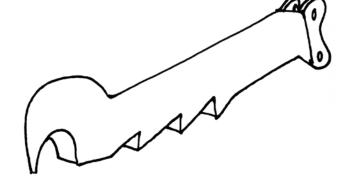
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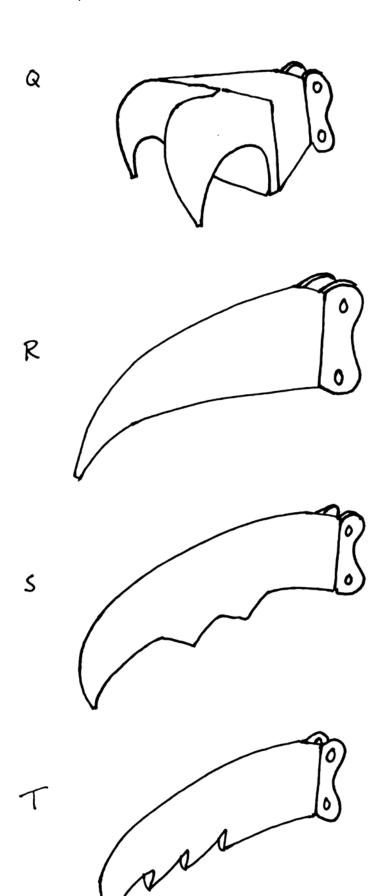


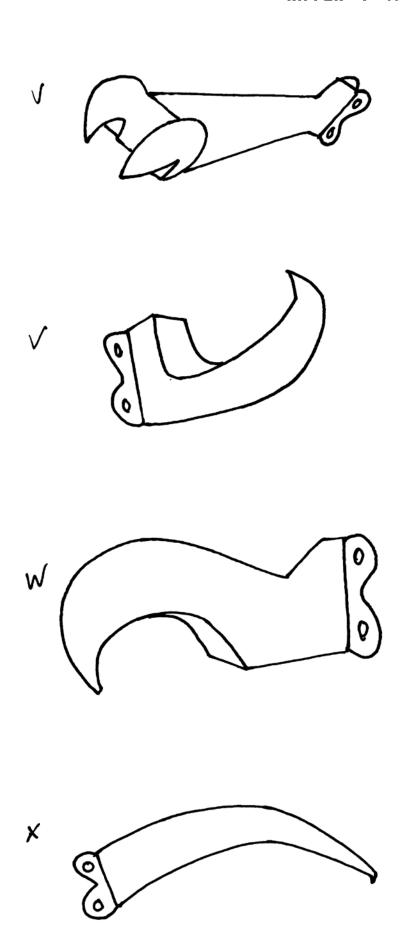
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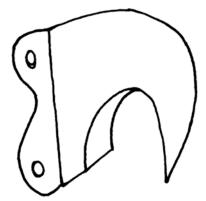




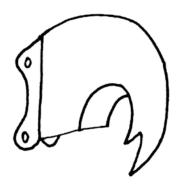


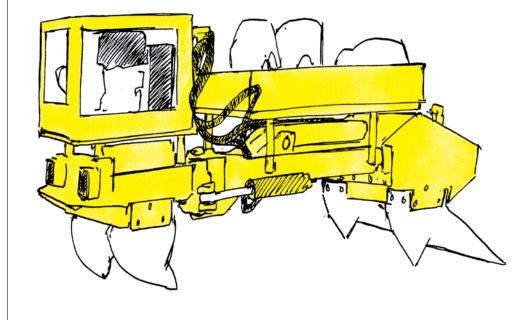
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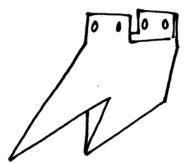


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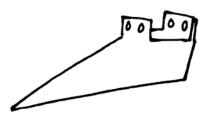




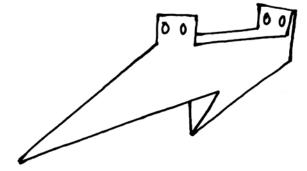
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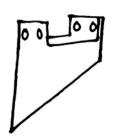
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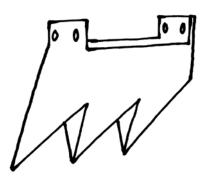
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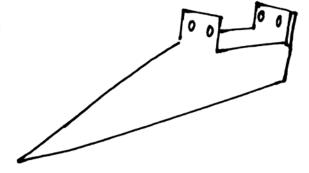
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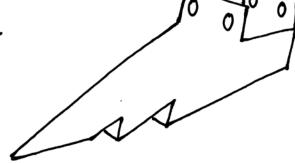
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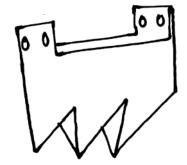
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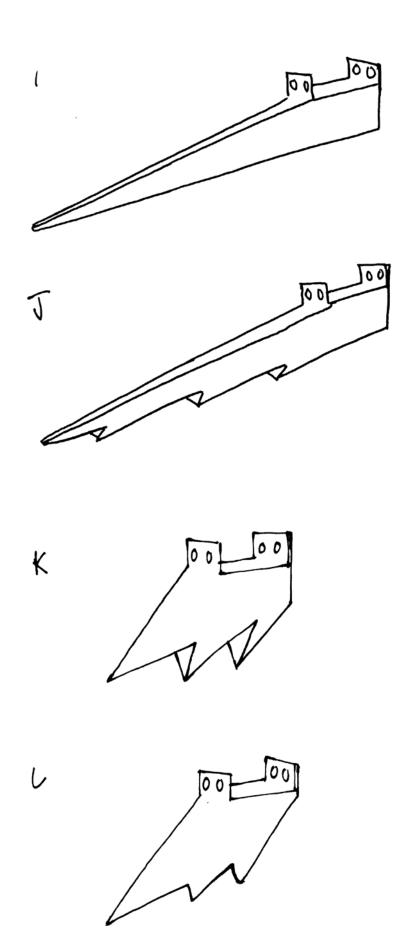


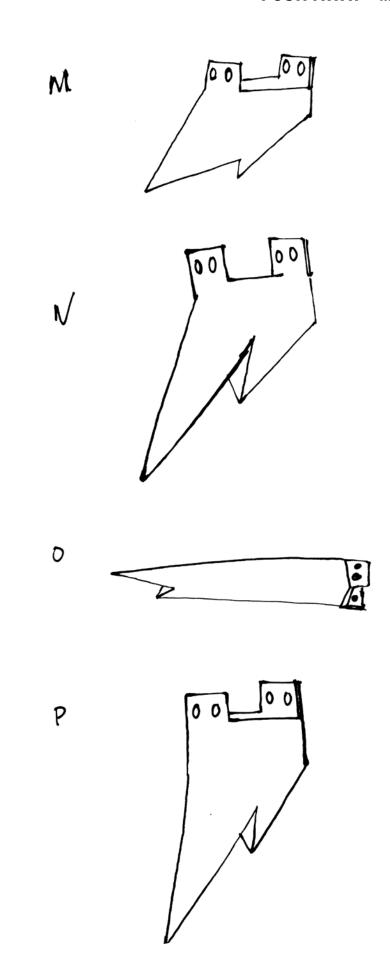
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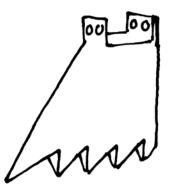
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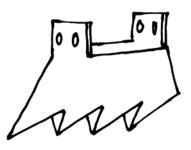
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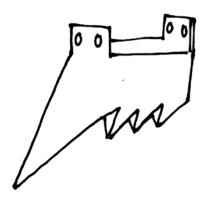
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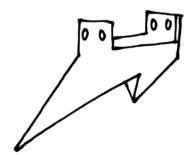
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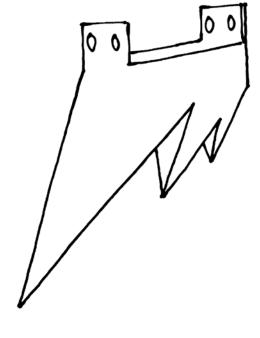
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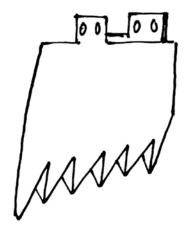


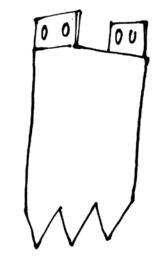
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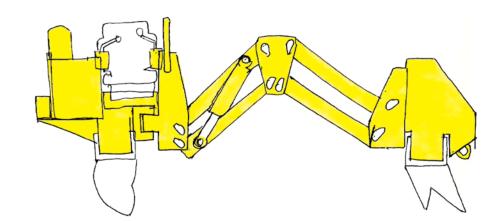
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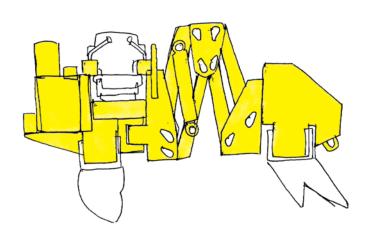
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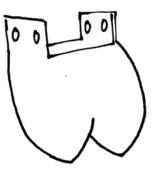
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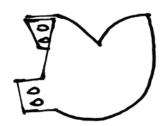
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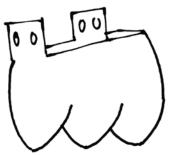
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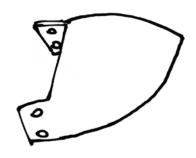
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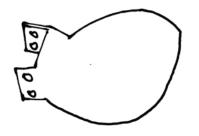
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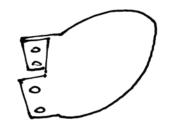
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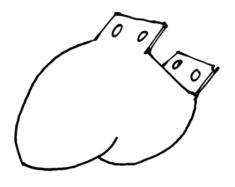
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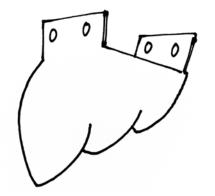
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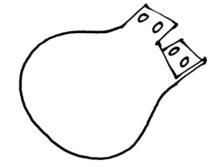
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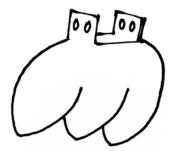
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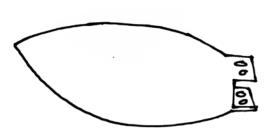
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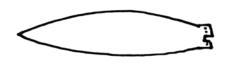
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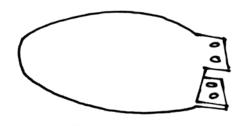
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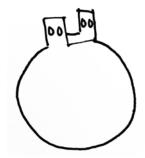
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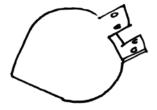
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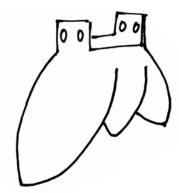
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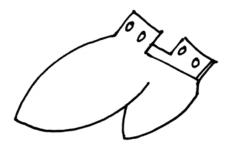
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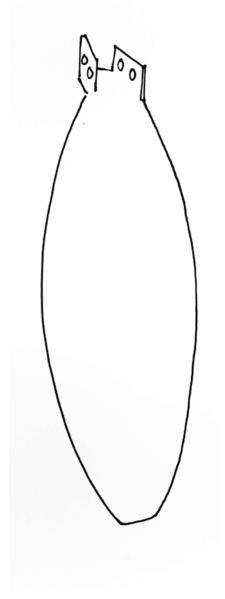


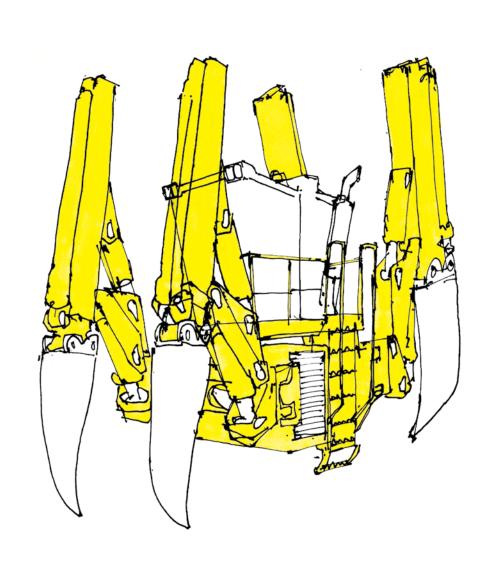
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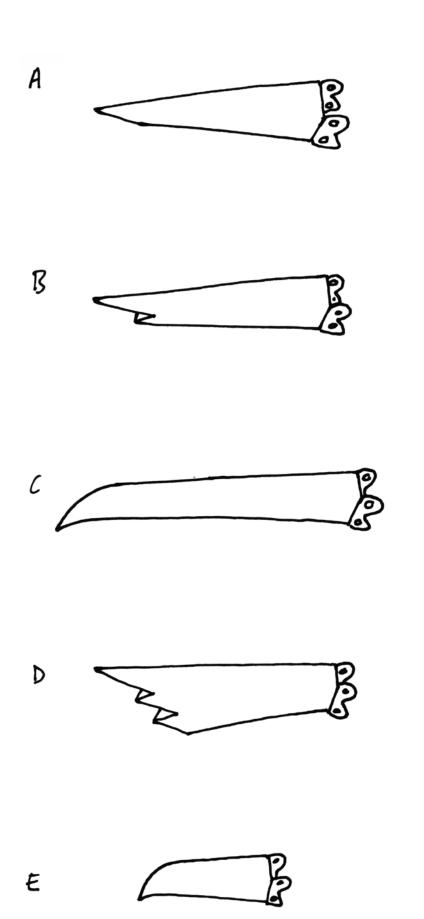
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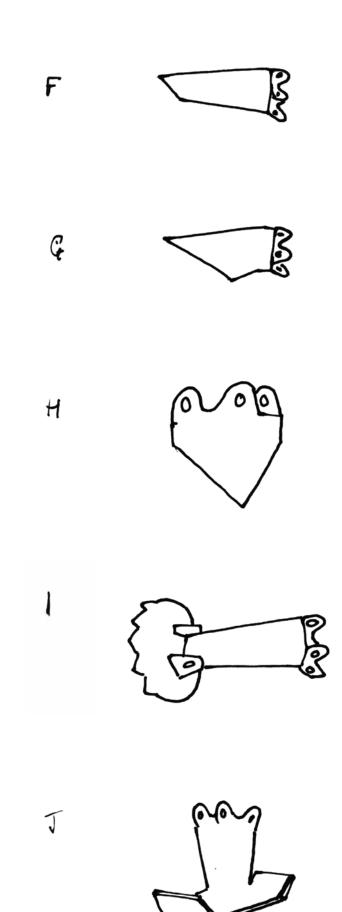


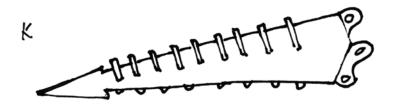
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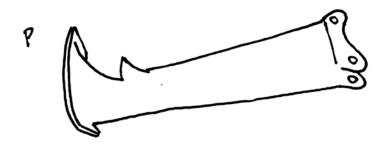




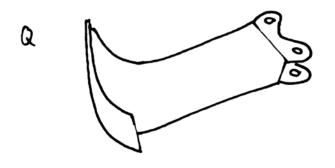


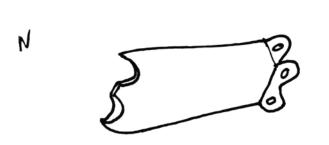


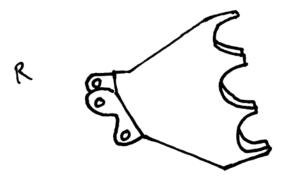








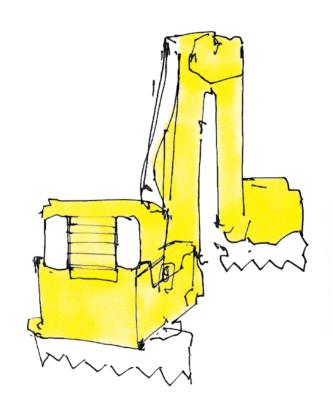


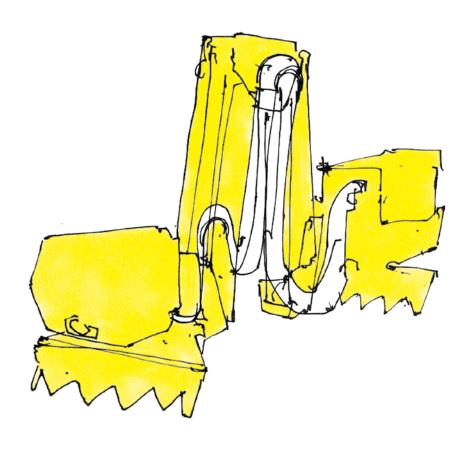


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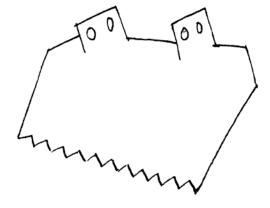
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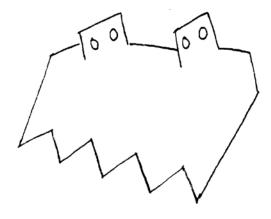




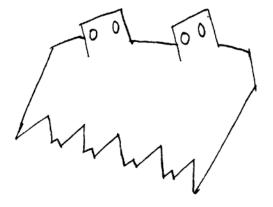
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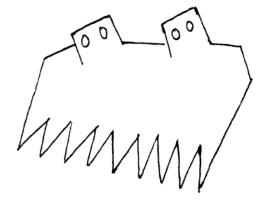
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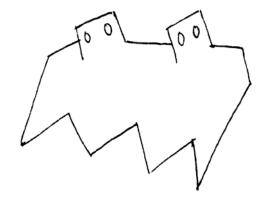
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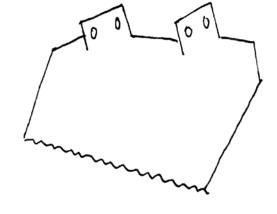
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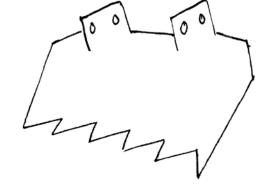
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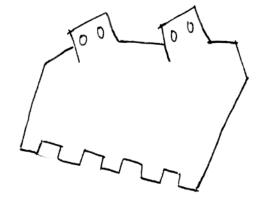
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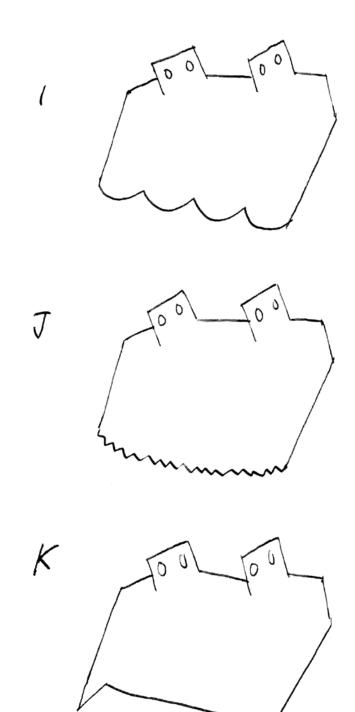
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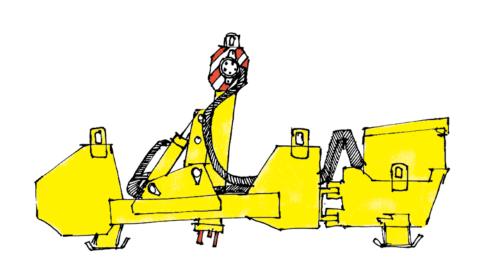


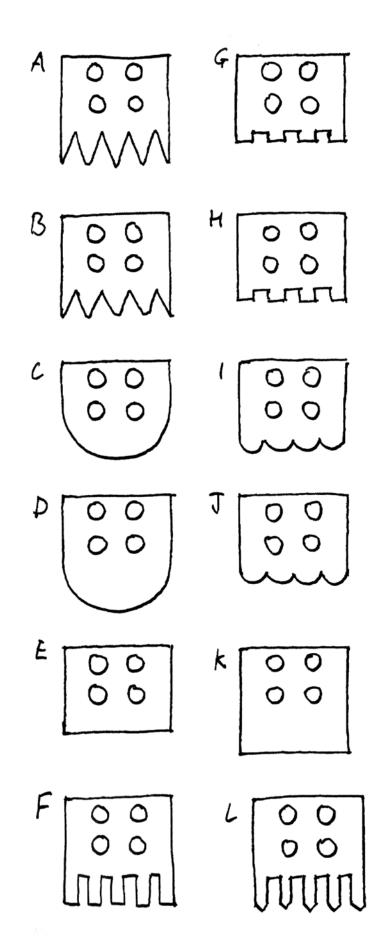
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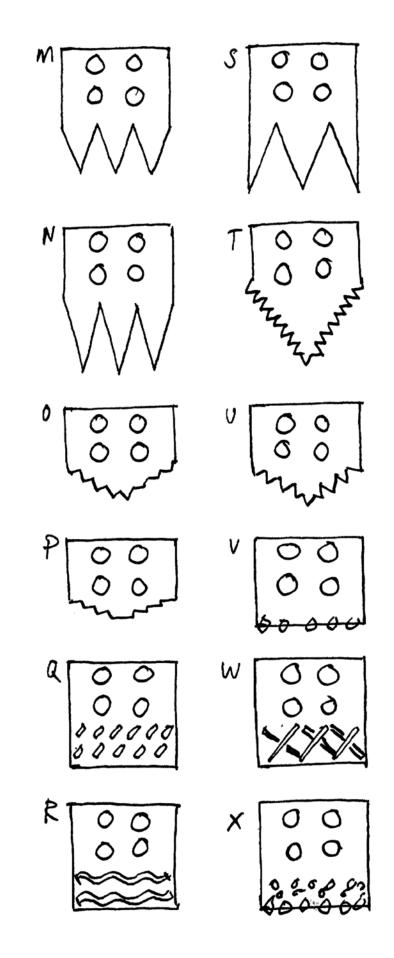


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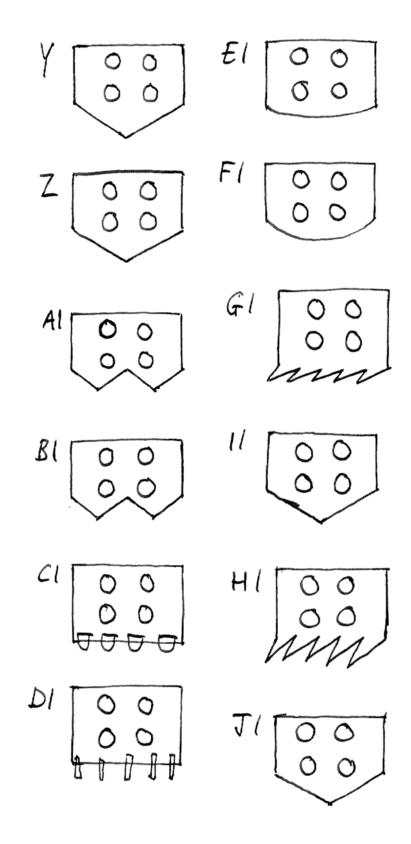


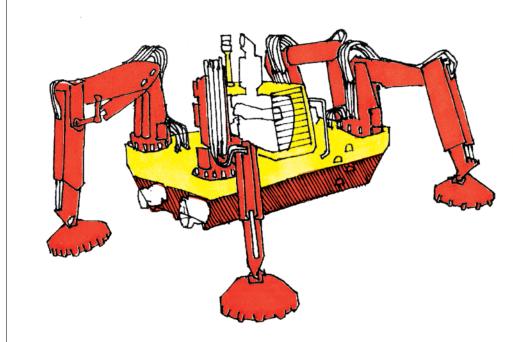






OFFSHORE TREADPAD







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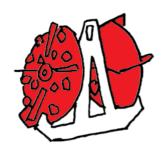
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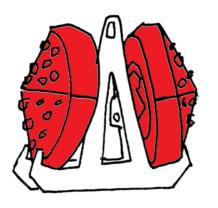
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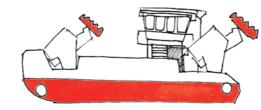
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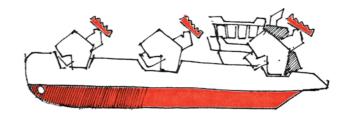
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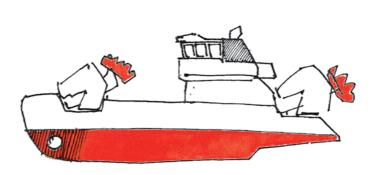
40 TON



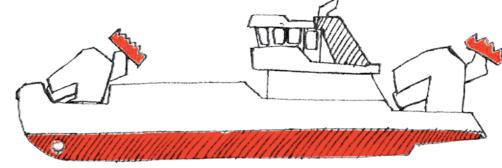
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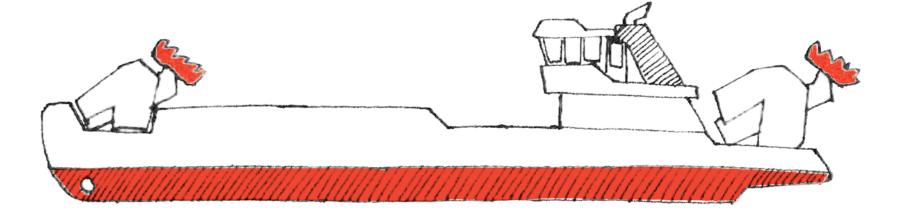
150 TON



200 TON

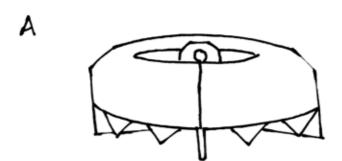


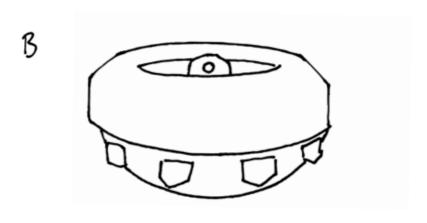
300 TON

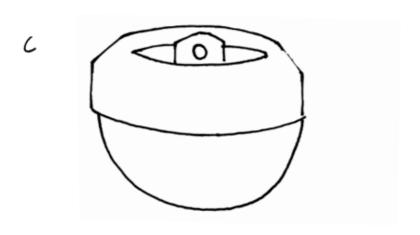


600 TON

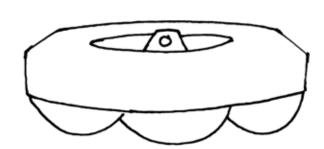
OFFSHORE TREADPAD A - C



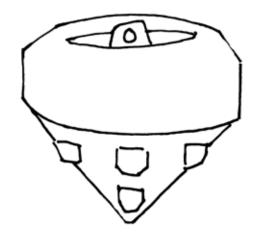




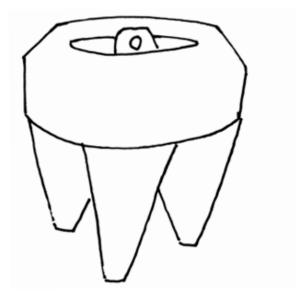


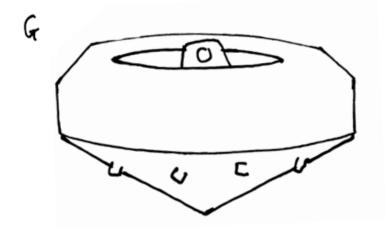


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STEP INDEX

Tooth A Material Dimension Year	Steel 26×15×15cm 2014
Tooth B Material Dimension Year	Steel 26×15×15cm 2014
Tooth C Material Dimension Year	Steel 26×15×15cm 2014
Tooth D Material Dimension Year	Steel 26×15×15cm 2014
Tooth E Material Dimension Year	Steel 26×15×15cm 2014
Tooth F Material Dimension Year	Steel 26×15×15cm 2014
Tooth G Material Dimension Year	Steel 26×15×15cm 2014

RIPPER INDEX

Tooth A	Version A	Tooth J	
Material	Steel	Material	Steel
Size	56×162×20cm	Dimension	39×180×20cm
Year	2011		
Private collection	London	Tooth K Material	Steel
Tooth B	Version A	Dimension	55×210×20cm
Material	Steel		
Size	65×210×54cm	Tooth L	
Year	2011	Material	Steel
Private collection	London	Dimension	55×210×20cm
Tooth C	Version A	Tooth M	
Material	Steel	Material	Steel
Dimension	55×150×20cm	Dimension	55×150×26cm
Year	2011		
Private collection	London	Tooth N	
		Material	Steel
Tooth D	Version A	Dimension	39×100×20cm
Material	Steel		
Dimension	56×170×20cm	Tooth O	
Year	2011	Material	Steel
Private collection	London	Dimension	29×90×20cm
Tooth E	Version A	Tooth P	
Material	Steel	Material	Steel
Dimension	62×102×20cm	Dimension	53×90×20cm
Year	2011		00110011200111
Private collection	London	Tooth Q	
		Material	Steel
Tooth F	Version A	Dimension	58×100×56cm
Material	Steel		
Dimension	53×90×53cm	Tooth R	
Year	2011	Material	Steel
Private collection	London	Dimension	55×200×20cm
Tooth G	Version A	Tooth S	
Material	Steel	Material	Steel
Dimension	55×180×19cm	Dimension	55×200×20cm
Year	2012		
Private collection	London	Tooth T	
		Material	Steel
Tooth H	Version A	Dimension	55×200×20cm
Material	Steel		
Dimension	55×100×19cm	Tooth U	
Year	2012	Material	Steel
Private collection	London	Dimension	58×220×56cm
Tooth I		Tooth V	
Material	Steel	Material	Steel
Dimension	36×100×20cm	Dimension	58×178×20cm
D.111C1131011	337100720CIII	D.111C1131011	30A 17 0A 20CIII

RIPPER INDEX

Tooth W Material Dimension	Steel 58×180×20cm
Tooth X Material Dimension	Steel 55×196×20cm
Tooth Y Material Dimension	Steel 53×90×20cm
Tooth Z Material	Steel

56×100×20cm

Dimension

DEER INDEX

Tooth A Material Dimensions	Steel 40×15×25cm	Tooth N Material Dimensions	Steel 40×15×70cm
Tooth B Material Dimensions	Steel 40×15×25cm	Tooth O Material Dimensions	Steel 70×20×40cm
Tooth C Material Dimensions	Steel 40×15×25cm	Tooth P Material Dimensions	Steel 69×20×40cm
Tooth D Material Dimensions	Steel 40×15×25cm	Tooth Q Material Dimensions	Steel 69×20×40cm
Tooth E Material Dimensions	Steel 60×20×40cm	Tooth R Material Dimensions	Steel 98×20×40cm
Tooth F Material Dimensions	Steel 60×20×40cm	Tooth S Material Dimensions	Steel 88×20×40cm
Tooth G Material Dimensions	Steel 60×20×80cm	Tooth T Material Dimensions	Steel 88×45×40cm
Tooth H Material Dimensions	Steel 60×15×40cm	Tooth U Material Dimensions	Steel 50×50×50cm
Tooth I Material Dimensions	Steel 60×20×40cm	Tooth V Material Dimensions	Steel 60×50×50cm
Tooth J Material Dimensions	Steel 60×20×40cm	Tooth W Material Dimensions	Steel 60×20×80cm
Tooth K Material Dimensions	Steel 60×20×40cm	Tooth X Material Dimensions	Steel 60×20×40cm
Tooth L Material Dimensions	Steel 70×20×40cm	Tooth Y Material Dimensions	Steel 70×20×40cm
Tooth M Material Dimensions	Steel 70×20×40cm	Tooth Z Material Dimensions	Steel 100×50×50cm

PUSH AWAY INDEX

MOUNTAINEER INDEX

Tooth A Material	Stool	Tooth N Material	Steel	Tooth A Material	Steel	Tooth N Material	Steel
Dimensions	Steel 60×104×20cm 2012	Dimensions	59×20×40cm	Dimensions	36×180×20cm	Dimensions	48×79×20cm
Year	2012	Tooth O		Tooth B		Tooth O	
Tooth B		Material	Steel	Material	Steel	Material	Steel
Material	Steel	Dimensions	40×20×90cm	Dimensions	36×180×20cm	Dimensions	40×100×20cm
Dimensions	56×20×40cm	Difficusions	10112011000111	Dimensions	55×155×256111	Dimensions	100110011200111
	0020	Tooth P		Tooth C		Tooth P	
Tooth C		Material	Steel	Material	Steel	Material	Steel
Material	Steel	Dimensions	58×20×50cm	Dimensions	40×140×20cm	Dimensions	36×100×20cm
Dimensions	65×20×40cm						
		Tooth Q		Tooth D		Tooth Q	
Tooth D		Material	Steel	Material	Steel	Material	Steel
Material	Steel	Dimensions	40×20×40cm	Dimensions	48×170×20cm	Dimensions	48×95×20cm
Dimensions	40×20×40cm						
		Tooth R		Tooth E		Tooth R	
Tooth E		Material	Steel	Material	Steel	Material	Steel
Material	Steel	Dimensions	58×20×50cm	Dimensions	41×120×20cm	Dimensions	36×50×20cm
Dimensions	60×20×40cm	T		T		T 11- 0	
To all F		Tooth S	Charl	Tooth F	Charl	Tooth S	Charl
Tooth F	Chaol	Material	Steel	Material	Steel 36×110×20cm	Material	Steel
Material Dimensions	Steel 80×20×40cm	Dimensions	60×20×40cm	Dimensions	36×110×20cm	Dimensions	58×50×20cm
Difficitsions	00×20×40CIII	Tooth T		Tooth G			
Tooth G		Material	Steel	Material	Steel		
Material	Steel	Dimensions	60×20×40cm	Dimensions	38×100×20cm		
Dimensions	80×20×40cm	2	33112311131111		56166 <u>2</u> 66		
		Tooth U		Tooth H			
Tooth H		Material	Steel	Material	Steel		
Material	Steel	Dimensions	60×20×40cm	Dimensions	36×50×20cm		
Dimensions	58×20×40cm						
		Tooth V		Tooth I			
Tooth I		Material	Steel	Material	Steel		
Material	Steel	Dimensions	60×20×40cm	Dimensions	56×100×20cm		
Dimensions	120×20×40cm						
Ta adda d		Tooth W	Charl	Tooth J	Charl		
Tooth J	Charl	Material	Steel	Material	Steel		
Material	Steel 120×20×40cm	Dimensions	69×20×50cm	Dimensions	58×50×20cm		
Dimensions	120×20×40(111	Tooth X		Tooth K			
Tooth K		Material	Steel	Material Material	Steel		
Material	Steel	Dimensions	60×20×60cm	Dimensions	36×190×20cm		
Dimensions	58×20×40cm	Difficusions	33112311336111	Dimensions	00×100×200111		
	00.,70.,100	Tooth Y		Tooth L			
Tooth L		Material	Steel	Material	Steel		
Material	Steel	Dimensions	58×20×50cm	Dimensions	36×120×20cm		
Dimensions	58×20×40cm						
		Tooth Z		Tooth M			
Tooth M		Material	Steel	Material	Steel		
Material	Steel	Dimensions	40×20×90cm	Dimensions	48×56×20cm		
Dimensions	58×20×40cm						

SHOVEL INDEX

KEYS INDEX

Tooth A		Tooth K		Tooth A		Tooth N	
Material	Steel	Material	Steel	Material	Steel	Material	Steel
Dimensions	50×24×40cm	Dimensions	50×24×40cm	Dimensions	10×15cm	Dimensions	10×15cm
Year	2014	Year	2014	Difficusions	TONTOCHT	Billiensions	TOXTOCITI
				Tooth B		Tooth O	
Tooth B				Material	Steel	Material	Steel
Material	Steel			Dimensions	10×15cm	Dimensions	10×15cm
Dimensions	50×24×40cm						
Year	2014			Tooth C		Tooth P	
				Material	Steel	Material	Steel
Tooth C				Dimensions	10×15cm	Dimensions	10×15cm
Material	Steel						
Dimensions	50×24×40cm			Tooth D		Tooth Q	
Year	2014			Material	Steel	Material	Steel
				Dimensions	10×15cm	Dimensions	10×15cm
Tooth D							
Material	Steel			Tooth E		Tooth R	
Dimensions	50×24×40cm			Material	Steel	Material	Steel
Year	2014			Dimensions	10×15cm	Dimensions	10×15cm
Tooth E				Tooth F		Tooth S	
Material	Steel			Material	Steel	Material	Steel
Dimensions	50×24×40cm			Dimensions	10×15cm	Dimensions	10×15cm
Year	2014						
				Tooth G		Tooth T	
Tooth F				Material	Steel	Material	Steel
Material	Steel			Dimensions	10×15cm	Dimensions	10×15cm
Dimensions	50×24×40cm						
Year	2014			Tooth H		Tooth U	
				Material	Steel	Material	Steel
Tooth G				Dimensions	10×15cm	Dimensions	10×15cm
Material	Steel						
Dimensions	50×24×40cm			Tooth I		Tooth V	
Year	2014			Material	Steel	Material	Steel
				Dimensions	10×15cm	Dimensions	10×15cm
Tooth H							
Material	Steel			Tooth J		Tooth W	
Dimensions	50×24×40cm			Material	Steel	Material	Steel
Year	2014			Dimensions	10×15cm	Dimensions	10×15cm
Tooth I				Tooth K		Tooth X	
Material	Steel			Material	Steel	Material	Steel
Dimensions	50×24×40cm			Dimensions	10×15cm	Dimensions	10×15cm
	2014			Dimensions	IUXIOCIII	Dimensions	IUXIOCIII
Year	2014			Tooth L		Tooth Y	
Tooth J				Material	Steel	Material	Steel
Material	Steel			Dimensions	10×15cm	Dimensions	10×15cm
Dimensions	50×24×40cm			Difficitions	10/10011	2111011310113	10/13(111
Year	2014			Tooth M		Tooth Z	
. 34.	2017			Material	Steel	Material	Steel
				Dimensions	10×15cm		10×15cm

Tooth AI Material Dimensions	Steel 10×15cm
Tooth BI Material Dimensions	Steel 10×15cm
Tooth CI Material Dimensions	Steel 10×15cm
Tooth DI Material Dimensions	Steel 10×15cm
Tooth EI Material Dimensions	Steel 10×15cm
Tooth FI Material Dimensions	Steel 10×15cm
Tooth GI Material Dimensions	Steel 10×15cm
Tooth HI Material Dimensions	Steel 10×15cm
Tooth II Material Dimensions	Steel 10×15cm
Tooth JI Material	Steel

Dimensions

10×15cm

OFFSHORE TREADPAD INDEX

Treadpad A Material Dimensions DIA	Painted Steel 100cm 140cm 180cm 200cm 250cm 450cm	Treadpad G Material Dimensions DIA	Painted Steel 100cm 140cm 180cm 200cm 250cm 450cm
Treadpad B Material Dimensions DIA	Painted Steel 100cm 140cm 180cm 200cm 250cm 450cm		
Treadpad C Material Dimensions DIA	Painted Steel 100cm 140cm 180cm 200cm 250cm 450cm		
Treadpad D Material Dimensions DIA	Painted Steel 100cm 140cm 180cm 200cm 250cm 450cm		
Treadpad E Material Dimensions DIA	Painted Steel 100cm 140cm 180cm 200cm 250cm 450cm		
Treadpad F Material Dimensions DIA	Painted Steel 100cm 140cm 180cm 200cm 250cm 450cm		

BIOGRAPHY

James Capper (b. 1987, UK) lives and works in South London. He taught himself welding growing up in Kent, and would go on to graduate from the BA Sculpture programme at Chelsea College of Art & Design and from the MA Sculpture programme at the Royal College of Art. He won the Jack Goldhill Prize for Sculpture at the Royal Academy Summer Exhibition in 2009 and was shortlisted for the Jerwood Sculpture Prize in the same year. His work has been the subject of solo exhibitions at the public institutions Modern Art Oxford (2011) and Yorkshire Sculpture Park (2013).

SELECTED EXHIBITIONS

2014 Shuffle / Step, Art Basel Hong Kong (solo)

2013 **Open Heart Surgery**, The Moving Museum, London (catalogue)

PeckhamNewYorkParis, Shoot the Lobster, New York

James Capper, Kirkaldy Testing Museum, London (solo)

Peckham Takeover, V&A Museum, London

A Change of Heart, Richard Attenborough Centre,

Leicester University, UK (catalogue) (forthcoming)

ArtAngel Open 100, UK

Divisions. Yorkshire Sculpture Park, UK (solo)

Treadpad - Pair 1, London Art Fair Projects

Tectonic, The Moving Museum, Dubai (catalogue)

Hydraulic Power Tools, The Armory Show, New

York (catalogue)

New Order, The Saatchi Collection, London (catalogue)

- 2012 OFFSHORE, Tim Sheward Projects, London (solo)
 20/12 London Art Now, National Trust, Lodge
 Park, Cheltenham
 Y E S: Young English Sculptors, Fundaziun Not
 Vital, Ardez, Switzerland (catalogue)
 Pertaining to things natural, Chelsea Physic
 Garden, London
 London Twelve, City Gallery, Prague, Czech
 Republic (catalogue)
 London Calling, Shizaru Gallery, London
 Fabricators, Hannah Barry, London (curator)
- 2011 Fleet, Hannah Barry Gallery, (solo)

 Bold Tendencies 5, Peckham, London, UK

 Ripper Teeth in Action, Modern Art Oxford (solo)

 (catalogue)
- 2010 Let There Be Sculpture!, New Art Centre, Roche Court, UK

 The Long Way Round, Hannah Barry, London (solo)
- 2009 The Oil Fields, Hannah Barry , London
 Summer Exhibition, Royal Academy of Arts,
 London
 Jerwood Sculpture Prize, Jerwood Space, London
 Ripper, Cass Sculpture Foundation, Goodwood
- 2008 Drawings for Machines, Hannah Barry, London

COLOPHON

Second edition published by Hato Press and Hannah Barry, 2014

ISBN: 978-1-910239-07-0

Co-ordination & Editor: Ben Eastham

Index: Chiara Barbieri

Design: Studio Hato

Printed by Hato Press, on Context Natural 115 and Corona Offset 240 gsm

Set in Oops Grotesque courtesy of the designers

Special thanks to: Madeleine Bessborough, Harriet Cooper, Nancy Durrant, Stephen Feeke, Donatien Grau, Steve Hurtado, Marie-Louise Laband, Clare Lilley, Anne Lühn, Rupert van Millingen, Sarah Mossop, Anthony and Anne d'Offay, Helen Pheby, Simon Sakhai, Claire Shea, Tim Sheward, Verity Slater, Michael Stanley, Natasha Vicars, Holly Willats and Alma Zevi

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