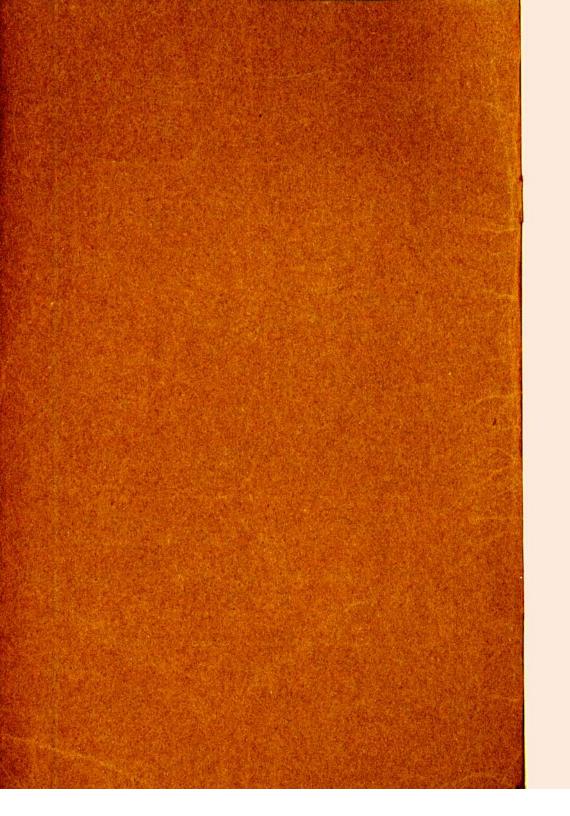
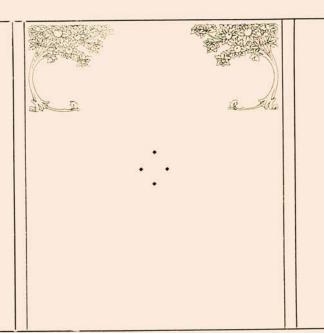


J. G. BODENSTEIN & CO.
Staatsburg-on-Hudson,
New York.



ICE TOOLS

AND ELEVATOR PLANERS



ESTABLISHED 1868

J. G. BODENSTEIN & Co.

Staatsburg-on-Hudson New York

GAZETTE ELECTRICAL PRINTERY, RHINEBECK, N. Y.



INTRODUCTION

N PRESENTING THIS CATALOGUE, we do not claim ourselves to be the oldest manufacturers of Ice Tools, but we do claim over 40 years of practical experience and success in the making of Ice Tools. We, furthermore, claim to have made more practical improvements than any of the other Ice Tool Manufacturers, some of which are the Inserted Tooth Plow and Marker, Patent Attachments of the Extension Swing Guide, Champion Elevator and Field Planers, Champion Floor or Field Leveler, etc., etc.

Being located on the Hudson River where immense quantities of ice are harvested every year under the most trying conditions, we have had more than a fair chance to thoroughly test every improvement of Ice Tools and have made them as nearly perfect in every single detail as science, ingenuity and skill can make them. We, therefore, can warrant every Ice Tool made by us to be the most up-to-date and reliable tool made.

We desire every Ice Man to have at least a sample of our line of Ice Tools so that they may prove by their practical work that they are what we claim them to be, the highest grade of Ice Tools manufactured. Our long experience and unwavering disposition to work for the best possible results has placed us in a leading position as Manufacturers of High Grade Ice Tools and this we are determined to maintain.

We desire to express our appreciation for the kindness of our customers in the past and solicit their continued patronage. To those who have not heretofore dealt with us, we wish to say: "Give us a trial and we will try and merit a continuance of your patronage."

J. G. BODENSTEIN & CO.,

STAATSBURG-ON-THE-HUDSON, N. Y.



GUARANTEE

LL OUR ICE TOOLS are warranted perfect in material and workmanship, and free from flaws and defects. We will gladly replace or repair, free of charge, anything that is found unsatisfactory, provided it is returned to us, and if upon investigation we are satisfied that the damage or breakage has not been caused by ill-usage or abuse.

TERMS

Our terms to any one who has a satisfactory rating in one of the recognized mercantile agents books are 30 days net. We also allow 30 days net to any one giving satisfactory reference from his bank or some reliable business house.

Customers who cannot give the necessary reference should accompany cash with order, or goods will be sent by express, C. O. D., or by freight with sight draft attached to bill of lading.

Any one desiring goods shipped C. O. D., must remit in advance sufficient to cover expressage both ways.

TELEGRAPH CODE

Telegraph orders may be considerably condensed by using our code words which appear before the list prices of the different tools. Prefix "Freight," "Express" or "Collect" (for C. O. D.) Please state method of shipment in each case.

In ordering goods in dozen lots, omit the word "dozen" and prefix the letter "D" to code word, as example: "Express Three Dremora" would mean express 3 dozen No. 371 Hand Tongs. "Freight Five Magnet" would mean freight 5 No. 274 Hoisting Tongs.

Use the code words "When" for the phrase "When can you ship" and "What" for "What is the price of."

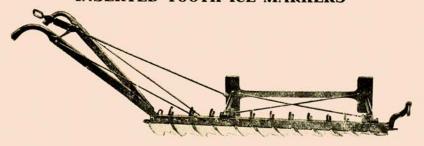
ICE MARKERS AND PLOWS

The teeth of our Ice Markers and Plows are made of the finest quality of Tool Steel, and the graduation of the gauge of the plows and markers is equally divided between the markers and the deepest plow. Our plows are gauged so they will work in with any of the standard makes. The clearing tooth is applied on all plows. The beams or backs are stiff, substantial and well bolted, and all except the deeper plows have adjustable head clevises. (See page 14). Handle guards are put on all the handles of our plows and markers. This prevents wearing of the handles when inverted and moved about in that position. (See illustration, page 15). The chip spaces are well cut out which enables free cutting to the beam or back. The guides are of the most substantial and neat form. We have avoided all unnecessary weight and still retain all the strength possible. We have the only reliable guide attachment that requires no bolts, pins, etc. It is positive, easy and quick to attach, and is therefore far superior to all others. (See page 6). A good, substantial case, well ironed, painted and strapped is furnished with every plow and marker. Filing gauges and instructions for filing are also furnished with every plow and marker.

Our Inserted Tooth Plows and Markers are the model of perfection, as we were the ones who originated and perfected the Inserted Tooth style of plow, although the construction has since been adapted by other tool makers, who at that time declared the idea to be impracticable, and predicted it would be of no value; but instead, it has become the most practical ice plow made; and now, as then, we lead in the progressive construction, and our Inserted Tooth Plows and Markers are unequaled in excellence of design, quality and high grade of workmanship.

Our Inserted Tooth Plows and Markers are up-to-date implements in every respect.

INSERTED TOOTH ICE MARKERS



11 Cutting Teeth. 3 1-2 Inches Deep.

All teeth interchangeable, and made of Best Tool Sicel. Weight, with extension guide and case, 161 lbs.

No.	Code Word	Each
100-Inserted Tooth Markers, with 22-in. swing guide	Abacist	\$70.00
101—Inserted Tooth Markers, with 22-in. and 32-in. swing guides -	- Abacot	78.00
102—Inserted Tooth Markers, with 22-in. x 32-in. extension guide	Abaft	73.00
103—Extra Inserted Teeth for Markers	- Abatis	2.00

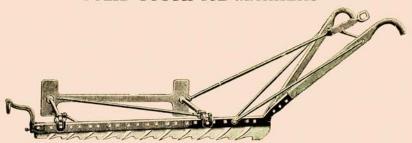
This Inserted Tooth Ice Marker has been used for years and it has proved a success in every respect. In the construction of this marker we have been very particular in getting the inserted teeth of the proper size to stand the work, still avoiding a large and cumbersome tooth, and thereby saving much extra filing when marker requires sharpening. The teeth are held by a wedge key, and the key, simply, by a small set screw.—Continued on next page.

INSERTED TOOTH ICE MARKERS-Continued

This marker is equipped with our new clevis head. This headpiece can be lowered or raised as the occasion might call for. This is the most decided improvement over all markers made with solid head piece or clevis. (See illustration, page 14). We also provide this marker with our improved depth gauge. This is a great convenience in regulating the amount of cut or depth of groove. (See illustration, page 15). The Inserted Tooth Marker has many advantages over the solid tooth marker. It is very much easier to keep in order, always retains the same depth as when new, and the teeth can quickly be replaced when damaged by stones. The alignment of this marker can be kept perfect and the depth of the cut can be changed very quickly by the adjustable depth gauge. This marker is perfect in workmanship and quality of materials. The teeth are made of the best tool steel accurately gauged, and tempered for long service.

Remember this style marker always retains its full depth, and in case of accident new teeth can be replaced in a few minutes. These markers are equipped with our patent attachment swing guide. This guide requires no pins, bolts, etc., to attach it to the marker, and it is the strongest extension guide made, as it double braces the swing arms. It is very easily changed from 22 in, to 32 in, or as many other sizes as wanted. This style of guide is more convenient than to have two separate guides. This is a very important feature especially where only one marker is used. (See illustration, page 6).

SOLID TOOTH ICE MARKERS



11 Cutting Teeth. 4 Inches Deep. Teeth of Best Tool Steel.

Weight, with extension guide and case, 149 lbs.

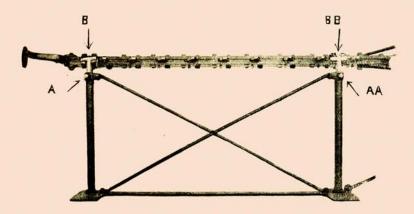
No.			Code Word	Each
104—Solid Tooth Markers, with 22-in, swing guide			Ablation	\$58.00
105—Solid Tooth Markers, with 22-in, and 32-in, swing guides	- 2		Abysm	66.00
106—Solid Tooth Markers, with 22-in. x 32-in. extension guide	2.432	-	Acacia	61,00
Extension Swing Guide to mark any size, can be furn	ished	to	order.	

The Teeth of our Solid Tooth Ice Markers are made of the best tool steel, carefully tempered for long service and have a perfect cutting edge, accurately gauged. We make this Solid Tooth Marker and guide with our patent guide attachment, which requires no bolts, pins, etc., to attach guide to marker. (See page 6). It is the neatest, simplest and strongest swing guide made. This is one of the important features our markers possess that no others have.

We furnish with this marker our improved depth gauge. This gauge can be set so as to cut to any desired depth, 0 to 4 inches. (See illustration, page 15).

Our patent swing guide attachment is used on our No. 100, 101, 102, 104, 105 and 106 markers. Unless ordered otherwise all markers will be furnished with extension guide to mark 22 and 32 inches. (See page 6)

PATENT EXTENSION SWING GUIDE



The above illustrates our Patent Extension Swing Guide and as we attach it to our markers and plows.

To attach this guide, no bolts, pins, etc., are required. It is a simple, self-locking arrangement whereby the guide can be attached in a rapid manner and is held firmly. This patent locking attachment has many advantages over the attachments commonly used as there is no trouble of losing pins or nuts. This attachment is appreciated in extremely cold weather. Our markers or plows will mark much straighter lines as there is no lost motion in connection.

To attach this guide to marker or plow, simply drop front guide arm end in lock marked "B," and rear arm in "BB" and guide is attached ready for work. To detach guide, take out arm at "BB" first; then at "B" and guide is detached.

To change the Patent Extension Swing Guide to different sizes, simply unloosen cone point set screws "A" and "AA" and pull arm to size required and set up set screw in its seat.

The following are some of the advantages of this guide:

No bolts or pins to get lost.

Quick to attach.

No lost motion.

Always marks straight.

Guides are double braced.

Strongest Extension Swing Guide made.

INSERTED TOOTH ICE PLOWS

The Inserted Tooth Ice Plow is no experiment. We have made this style of plow for many years and it is now the leading ice plow on the market. No up-to-date ice man can afford to be without them, as they do not reduce in depth by wear; and in case of a bruised tooth they can be sharpened or a new tooth inserted and put in shape for work in a very few minutes, where the solid tooth plow would have to be sent to the shop for repairs. All teeth in our Inserted Tooth Plows are made interchangeable so that there is no chance of trouble in putting in a tooth.

INSERTED TOOTH ICE PLOWS-Continued

With our Inserted Tooth fastenings, the teeth are held as firmly as a solid tooth, and they will not tremble or get loose, nor change the alignment when tightening the teeth as some fastenings do.

Our fastenings are most simple and durable, and while other makers have been changing their style of fastening from time to time, we have been using this style for at least 15 years, and have enjoyed the most flattering success. This is a point that should be well considered before purchasing Inserted Tooth Plows, as the tooth fastening is one of the most vital parts of a good ice plow. (See illustration of Inserted Tooth Fastenings on page 14).

The Inserted Tooth Plows are so simple that the ordinary man can easily keep them in perfect working order. Our Inserted Tooth Plows, combined with neatness in finish and beauty of shape, are the model of perfection.

It is well to remember in purchasing an Ice Plow, that the Inserted Tooth Plow can be one size smaller than a Solid Tooth and still give the same general results.

Inserted Tooth Plows always retain their full depth and easy cutting pitch.

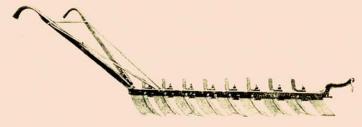
All Inserted Tooth Plows are furnished with the clearing tooth.

A depth gauge or forerunner is furnished with every Inserted Tooth Plow. (Page 14)

The Inserted Teeth are all interchangeable.

Handle Guards are furnished on all plows and markers. (See page 15).

Inserted Tooth Plows can be furnished with the plain or extension swing guide, to mark any size cake. (See page 6).



6-Inch Inserted Tooth Ice Plow, 8 Cutting Teeth.

Teeth of Best Tool Steel and Interchangeable. Weight, with case, 110 lbs.

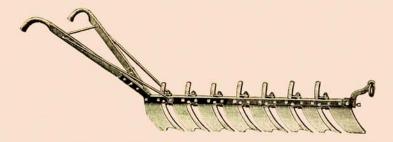
No.	Code Word	Each
107—6-in. Inserted Tooth Plows	Acarid	\$57.00
108-6-in, Inserted Tooth Plows, with 22-in, swing guide	 Accolade 	65.00
109-6-in, Inserted Tooth Plows, with 22-in, x 32-in, extension guide	Accrue	68.00
110-Extra Inserted Teeth for 6-in. Plows	Ace	2.50

Our Inserted Tooth Ice Plows are the best that can be made. We were the first to make them and our long experience has enabled us to offer the most up-to-date plows made. Our 6 in, and 8 in, plows have the improved adjustable head piece or clevis. This head piece can be raised or lowered as desired. This is a most decided improvement over the solid forged head and it is only necessary to be seen to be appreciated. (For illustration, see page 14).

A depth gauge or fore runner is furnished with every Inserted Tooth Plow. (See page 14). The 6 in. Plow equipped with two of our fore runners makes an excellent groove opener. (See illustration of fore runner, page 14).

Filing gauges and directions for filing are farnished with every plow and marker, but upon receipt of ten (10) cents, we will furnish an extra filing gauge and directions.

INSERTED TOOTH ICE PLOWS—Continued



8-Inch Inserted Tooth Ice Plow, 7 Cutting Teeth.

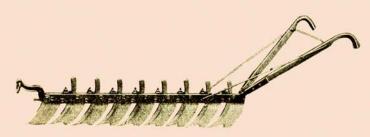
Teeth of Best Tool Steel and Interchangeable. Weight, with case, H7 lbs.

No. 111—8-in Inserted Tooth Plows, 7 112—8-in Inserted Tooth Plows, 7 113—8-in Inserted Tooth Plows, 7	cutting	teeth.	with	22-in	swine	guide	Code Word Acetate Acid	Each \$58,00 66,00
tension guide 114—Extra Inserted Teeth for 8-in.	-	-	-		- 1	-	Acme Acorn	69,00 2,75

Parties desiring to exchange their old plows for Inserted Tooth Ice Plows will do well by viting to us, by giving maker's name, actual size of old plow and general condition.

The Inserted Tooth Ice Plows always retain their full depth. All teeth are interchangeable and new teeth can be replaced on the ice field in less than five minutes, and the alignment of teeth can be kept perfect. With our Inserted Tooth Fastenings (see illustration, page 14) the alignment of the teeth will not change as in other makes. This is an important feature.

The Inserted Tooth Ice Plow is the most up-to-date implement on the ice field.

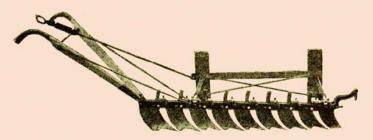


8-Inch Inserted Tooth Ice Plow, 8 Cutting Teeth.

Teeth of Best Tool Steel and Interchangeable. Weight, with case, 122 hs.

No.	Code Word	Each
115—8-in. Inserted Tooth Plows, 8 cutting teeth	Acquest	\$60,00
116-8-in Inserted Tooth Plows, 8 cutting teeth, with 22-in swing guide	Acre	68 00

INSERTED TOOTH ICE PLOWS-Continued

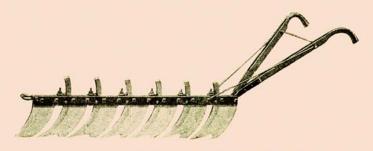


8-Inch Inserted footh Ice Plow with 22-in. x 32-in. Extension Swing Guide.

8 Cutting Teeth. Weight, with case and guide, 171 lbs.

No.						Code Word	Each
117-8-in, Inserted Tooth Plows, 8 cutting						4	oberta van
tension guide -						Acrobat	871.00
118-Extra Inserted Teeth for 8-in. Plows	-	70	7	9	-	Acrospire	2.75

Solid or extension guides (see page 6) can be fitted to our Inserted Tooth Plows—The above illustration shows our extension swing guide attached to an 8-in, 8 tooth plow—An Inserted Tooth Plow with guide makes the best obtainable plow for the small harvester.



10-Inch Inserted Tooth Ice Plow, 6 Cutting Teeth.

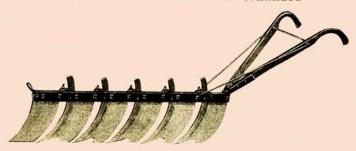
Teeth of Best Tool Steel and Interchangeable. Weight with case, 123 lbs.

No.	Code Word	Each
119-10-in, Inserted Tooth Plows	Acrostic	\$61.00
120-10-in. Inserted Tooth Plows, with 22-in. swing guide	- Action	69.00
121-10-in. Inserted Tooth Plows, with 22-in. x 32-in. extension guide	Actress	72.00
122-Extra Inserted Teeth for 10-in. Plows - · · · -	 Acumen 	3.25

All Extension Swing Guides that are furnished with our Inserted Tooth Plows are the same as illustrated on page 6.

We put handle guards on all our plows and markers. This prevents wear when plow is inverted and moved about. (See page 15 for illustration).

INSERTED TOOTH ICE PLOWS-Continued



12-Inch Inserted Tooth Ice Plow, 5 Cutting Teeth.

Teeth of Best Tool Steel and Interchangeable. Weight, with case, 1251bs,

No.	Code Word	Each
123—12-in. Inserted Tooth Plows	Adage	\$62.00
124-12-in. Inserted Tooth Plows, with 22-in. swing guide	Addax	70.00
125—12-in. Inserted Tooth Plows, with 22-in. x 32-in. extension guide	Addendum	73.00
126—Extra Inserted Teeth for 12-in. Plows	Adder	3.75

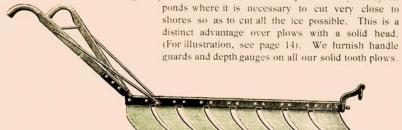
All plows are fitted with the Clearing Tooth. This is a non-cutting tooth and takes the place of the old style blank plate. The Clearing Tooth, being in front of the cutting teeth and having a curved and webbed face, clears the grooves of chips, and leaves the cutting teeth free to do their work.

All plows and markers are guaranteed to give perfect satisfaction. (See our guarantee, page 3).

SOLID TOOTH ICE PLOWS

Our Solid Tooth lee Plows are made very rigid and the teeth are made of the best tool steel, hand forged, carefully tempered and gauged so that the deeper plows will follow the shallow ones. All our plows are gauged with uniformity.

The 6, 7 and 8 inch plows are all furnished with an adjustable head piece, which can be lowered or raised, to suit the length rope desired to use. This head piece is very handy on



8-Inch Solid Tooth Ice Plow, 7 Cutting Teeth.

Teeth of Best Tool Steel.

Weight, with case, 4124bs.

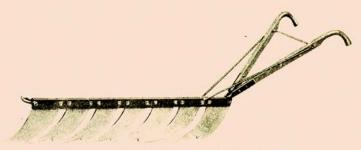
SOLID TOOTH ICE PLOWS-Continued

No. 127—6-in. Solid Tooth Plows, 8 cutting teeth 128—6-in. Solid Tooth Plows, 8 cutting teeth, with 22-in. swing guide 129—6-in. Solid Tooth Plows, 8 cutting teeth, with 22-in. x 32-in. exten-	Code Word Adit Admiral	\$42.00 50.00
sion guide	Ado	53,00
130-7-in. Solid Tooth Plows, 7 cutting teeth 131-7-in. Solid Tooth Plows, 7 cutting teeth, with 22-in. swing guide 1327-in. Solid Tooth Plows, 7 cutting teeth, with 22-in. x 32-in. exten-	Adobe Advent	44.00 52.00
sion guide	Advice	55.00
1.33—8-in. Solid Tooth Plows, 7 cutting teeth 1.34—8-in. Solid Tooth Plows, 7 cutting teeth with 22-in. swing guide 1.35—8-in. Solid Tooth Plows, 7 cutting teeth, with 22-in. x 32-in. extended	Advocate Aedile	48,00 56,00
sion guide	Aegis	59.00
136-8-in. Solid Tooth Plows, 8 cutting teeth 137-8-in. Solid Tooth Plows, 8 cutting teeth, with 22-in. swing guide 138-8-in. Solid Tooth Plows, 8 cutting teeth, with 22-in. x 32-in. exten	Aeronaut	50,00 58,00
sion guide	Aerophyte	61.00

FILING DIRECTIONS

Filing gauges and directions for filing are furnished with every plow and marker. Our filing directions are very simple and easy to understand, and we are positive that no trouble will be experienced in filing plow or marker if they are carefully followed.

Upon receipt of (10) cents, we will furnish an extra filing gauge and directions for filing



10-Inch Solid Tooth Ice Plow, 6 Cutting Teeth.

Teeth of Best Tool Steel. Weight, with case, 117 lbs.

No. 139—10-in, Solid 140—10-in, Solid	Tooth Plows,	6 cutting teet	h, with 2	2-in. swi	ng guide	Affinage	Each \$53,00 61,00
141—10 in. Solid si	Tooth Plows, on guide -					Affinity	(34,()()
142—12 in. Solid 143—12-in. Solid	Tooth Plows,	5 cutting teet	h, with 2	2-in. sw	ing guide	Afreet Agate	58.00 66.00
144—12-in. Solid	Tooth Plows, ion guide -	5 cutting tee	n, with 2	22-in. X 2	2-in, exter	Agave	69,00
1440—14-in. Soli 1441—16-in. Soli						Agawam Agee	(\$4,00 (\$8,00

We furnish filing gauges and directions with every plow and marker, free of charge

HAND ICE PLOWS

Hand Ice Plows are used where ice is stored in large cakes so as to cut the dividing grooves preparatory to splitting into small cakes, also for cutting up factory "plate" ice. They are also useful for making the first line on the ice field, and finishing out the ends of grooves made by horse plows. They are made of the best tool steel, nicely finished and furnished with a good case to protect the teeth.



6-Inch Hand Ice Plow. Teeth of Best Tool Steel.

Weight, with case, is the.

No.									****	
148-6 in. Hand Plows									Code Word	Each
110 7 in Unat Di			+1	14			20		 Agog	\$16.50
149-7-in. Hand Plows	5	(+	(8)	10	-	- 12	7	1	Agont	17.50

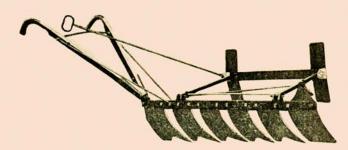
OUR "SPECIAL" ICE PLOWS

Ottr "Special" Plows are made of good materials and the teeth have a polished finish. They are far superior to plows made of cheap material, as usually the teeth of such plows do not have a polished finish, for it is then more difficult to discover the defects which often occur in low-priced materials such as used in some cheap makes. These are very important features over other low-priced plows, and these plows only need comparison to show their superiority.

These plows have five cutting teeth, a clearing tooth and a raised head piece, and will cut two inches at a time to a depth of 8 or 10 inches. They are furnished with a good, substantial extension swing guide to mark 14 to 24 inches, or 22 to 28 inches. A good case, well ironed and painted, is furnished with every plow. These plows have our guarantee to give perfect satisfaction. (See guarantee, page 3).

Made expressly for Farmers, Dairymen and Butchers, on the exact principles of the high grade plow.

OUR "SPECIAL" ICE PLOWS-Continued



8-Inch "Special" Ice Plow, 5 Cutting Teeth.

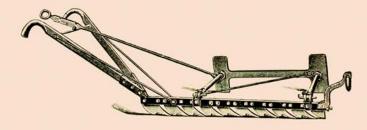
Teeth of Best Tool Steel and Polished. Weight, with extension guide and case, 117 lbs.

If forerunner or depth gauge is desired, add \$1.00 to list price.

No Code Word	Each
145— 8-in. "Special" Plows, with extension guide 14 to 24-in. or 22 to 28-in. Agio	\$30,00
146—10-in. "Special" Plows, with extension guide 14 to 24-in. or 22 to 28-in. Agnate 1460—12-in. "Special" Plows, with extension guide 14 to 24-in. or 22 to 28-in. Agnew	35.00

OUR "SPECIAL" ICE MARKER

Our "Special" Marker is made expressly for those who desire a cheaper marker than the regular style. They are made on the same lines, have 11 cutting teeth, are $3J_2$ in. deep, and will cut 2^34 in. at a time. They are furnished with a good, serviceable extension swing guide to mark 22 and 32 in. or other sizes if desired. A case well ironed and painted is furnished to protect the teeth from injury. This marker can be furnished with a depth gauge. If so desired, add \$1.00 to list price.



Our "Special" Marker, 11 Cutting Teeth, 3 1-2 Inches Deep.

Teeth of Best Tool Steel and Polished. Weight, with extension guide and case, 148 ibs.

No. Code Word Each 147—3½-in. "Special" Marker, with 22-in. x 32-in. extension guide Agnomen \$40.00



Plow Rone. Length, 8 Feet.

No.			Code Word	Each
150-Plow Rope:	, with thimble one end and	Matched Hook other end	Alma	\$1.75
	, with Matched Hooks both		Alpha	2.00

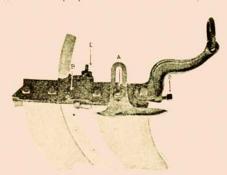
Our Plow Ropes are made of 1 in. Best Manila Rope.



ICE TOOL FILE.

No. 152—les Tool Files					Code Word Alphin	Per Doz. \$3.00
						Each
153—File Handles					Alphonso	.05

Our Ice Tool Files are of the finest grade of files and are especially adapted for filing plows and markers, and sharpening ice tools. Experience has taught us that no file is too good for this purpose. These files are very much better than ordinarily sold.





FORE RUNNER.

DEPTH GAUGE.

No.				Code Word	Ench
1530-Fore Runners and Depth Gauges for	r Plows		+5	Alps	\$1.00

The above Fore Runner and Depth Gauge is the same attachment, only differently applied. When attached to front of plow, it is called a fore runner and when attached to rear of plow a depth gauge. We equip all our Inserted and Solid Tooth Plows with one of these attachments.

This attachment is of advantage to a plow as a fore runner. It then enables a plow to cut to its full depth.

When attached to rear of a plow as a depth gauge, it is very handy when plowing to a certain depth as the feed of the plow does not have to be changed. Two of these runners attached to a six inch plow, one in front and one in rear, makes an excellent groove opener when grooves have become partly frozen during the night.

These attachments can be put on any plow. We furnish them on all except our Special Plows. The Fore Runner or Depth Gauge can be put on "Special" Plows at an additional cost of adding list price of part to the list price of plow.

No.			Code Word	Each
154-Head Pieces for old plows and markers	5.7		Alpine	\$1.25

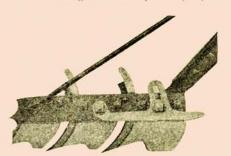
These head pieces can be lowered or raised as the occasion might call for by moving set screw marked "D" in the illustration on previous page. They are a most decided improvement over the solid head piece or clevis. These head pieces can be attached to any plow or marker. We furnish them on all markers and on 6, 7, 8, and 10 inch plows.



HANDLE GUARD.

No.	 	 e en au		Code Word	Per Pan
155-Handle Guards for old plows			1/4	Alpowa	\$0.25

Handle Guards prevent wear when plow is inverted and moved about. All our plows are furnished with handle guards and all plows and markers should have them on as they are really a necessity. These handle guards can be put on by any one.



DEPTH GAUGE FOR MARKERS.

No.				Code Word	Each.
156-Depth Gauges for markers		41		Alsea	\$1.00

Our Improved Depth Gauge is a great convenience in regulating the amount of cut or depth of groove. This style we furnish on all markers. These depth gauges can be attached to any marker. The above illustration shows this gauge attached to our Inserted Tooth Marker. Both Inserted and Solid Tooth Markers are equipped with the Depth Gauge.

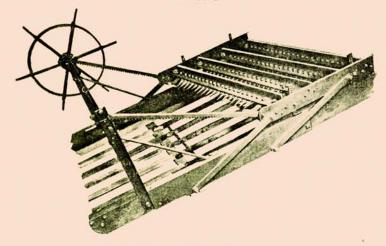
CHAMPION ELEVATOR PLANER

The Elevator Planer has become a recognized necessity. Its use for one season will demonstrate that it is an important machine for economical reasons.

lee passed through the elevator planer insures uniformity of thickness, and after stored in house will present a surface as level as possible, as it will remove all protruding lumps and unevenness which cause uneven surface and therefore necessitates more labor in the house to store cakes properly.

Ice run through the Elevator Planer is also considered purer and will demand a better price, as all the soft and impure surface is removed.

ANGLE CUTTER BAR NO GIVE NO TREMBLE SATISFACTION GUARANTEED LIGHT VERY RIGID STRONG



Champion Elevator Planer 2 Cutter Bars .

Pat. May 21, 1904.

Weight of Planer complete, for 4 foot elevator, 500 Hs,

No. 157—Champion Elevator Planers, one cutter bars 158—Champion Elevator Planers, two cutter bars 159—Champion Elevator Planers, three cutter bars 160—Champion Elevator Planers, four cutter bars 161—Champion Elevator Planers, five cutter bars 162—Champion Elevator Planers, six cutter bars 1620—Champion Elevator Planers, eight cutter bars	Vode Word Alta Althea Alto Alum Amble Ambush Amburg	\$100,00 125,00 150,00 175,00 200,00 225,00 275,00
163—Extra Cutter Bars, complete to attach to planer	Ameer	25,00
164—Champion Elevator Planer Knives	Amice	50
165—Champion Elevator Planer Knife Bolts	Amity	10

CHAMPION ELEVATOR PLANER—Continued

The Champion Elevator Planer has all the advantages of the best planers now made, and it has several new features that the other planers do not possess. This planer is very strong and rigid; it will not give or tremble at the heaviest work. The heavier the cut the steadier it will work. This is caused by its peculiar construction and by the carriage always sitting directly on the elevator incline. This machine can be raised to clear a cake or any other obstruction quicker than any planer made and it can be done very easily. The carriage moves away from, not toward, the point of obstacle when raising knife carriage up.

With this planer we believe the danger of being torn off by the chain or hold bar is reduced to a minimum. In case of chain or hold bar coming up incline on top of a cake, the chain or hold bar will lift carriage out of danger and let it pass by. This, we consider, is a very important feature, as it does not require the amount of attention.

This machine is made almost entirely of steel.



CHAMPION KNIFE.

The Champion Knife, such as we use on this planer and on our Champion Field Planer (illustrated above,) we believe is the most perfect knife made. Each point is a separate knife, and when bolted to cutter bar they make one continuous cutting edge. The points of these teeth are made just enough rounded to make a very strong point, and make a corrugation that does not tend to split the cakes. With this knife the ridges are all planed level. These knives are made of the best tool steel and are carefully tempered for long service. The knives are very easily kept sharp by filing or grinding, as the knives are open or hollow on the top. We can furnish this planer with any number of cutter bars desired. Why buy a stationary planer when you can get this planer with 6 or 8 cutter bars and have all the advantage of movable carriage?

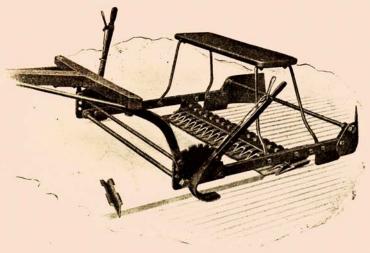
In ordering Elevator Planers always use our order form, as this will avoid any chance for error in making up planer to fit incline. We send this planer on trial.

This planer has been thoroughly tried for a number of years, and we have received only words of praise for its simplicity, rigidity and ease in working.

CHAMPION FIELD CULTIVATOR OR PLANER

This Cultivator is in a Class by itself. There are None Equal to it.

See our Guarantee.



Pat. May 24, 1394.

A Planer That Planes Level.

No Marking or Grooving required. Capacity of cut, 3 inches deep and 40 inches wide.

Weight, with pole, 218 tos.		
No.	Code Word	Each
166—Champion Field Planers with pole complete	Anapest	\$70,00
167—Extra Champion Field Planer Cutter Bars	Anarch	20,00
168—Extra Champion Field Planer Knives	Anat	.50
169—Extra Champion Field Planer Knife Bolts	Anchor	_10

This is a most invaluable machine for removing dirty or snow ice on the ice field. The principal advantages of this cultivator over the old style planer are, it does not require grooving by the marker, it is not as hard work for the horse, and it is much easier to scrape after as the corrugations prevent the men and horses from slipping. A good team of horses can take off at a single cut, 3 inches deep and 40 inches wide. This cultivator is very useful in removing frozen snow drifts, lumps, etc.

The amount of cut is regulated by the two levers, one on each side of the frame. It can be adjusted from the smallest to the largest cut simply by setting the levers from one notch to another. This cultivator will plane the surface more level than any of the others made with long runners for depth gauge. On our cultivator we have a short shoe for the depth gauge. This shoe will pass over lumps or uneven patches of ice much easier and will not cause the cultivator to plane uneven, and still this shoe has sufficient a triace to carry cultivator in soft ice.

It is very important to have a machine to plane level and to match in nicely with each cut. With our cultivator it does it perfectly, either in smooth or uneven ice. This is a feature to be well considered before purchasing a Field Cultivator. This cultivator has our Champion knife, the same as used on our Elevator Planer, a Model knife for this purpose.

We furnish a pole with cultivator. This is to keep the cultivator straight and under the control of the driver.

We guarantee this planer to give perfect satisfaction under all circumstances, and to plane level when other machines will not. We will gladly send this machine on trial to any responsible party who desires a machine for the purpose that this machine is made for, and if it fails to do as we state, it can be returned at our expense. WHAT MORE CAN WE SAY:



CHAMPION FLOOR LEVELER.

Patented. Weight, 13 lbs.

No.					Code Word	Each
176—Champion Floor Levelers	147			97	Annals	\$6.00
177-Extra Champion Floor Leveler Knives .		10	74		Annex	.50
178-Extra Champion Floor Leveler Knife Bolts	101			74	Aorta	.10

Our Champion Floor or Field Leveler is used for leveling old floors before the new ice is harvested, for leveling floors while the ice is being harvested and for removing lumps or the uneven surface from the field. It is a very useful tool and is superior to any other tool used for this purpose.

It is made of first class material and the teeth are of the finest quality of tool steel, carefully tempered for a good cutting edge. The handle is made adjustable so as to suit the height of the user. This is a very important feature of this tool as it avoids any discomforts in using it. One man is able to do more work with the Champion Leveler than two or three can do with the shaver-style leveler.

Allow us the privilege of sending you one of these tools on trial and if not satisfactory you may return it as they are guaranteed to give perfect satisfaction in every respect. (See our guarantee, page 3).



SHAVER STYLE FLOOR LEVELER

Weight, 6 lbs.; length, 4 ft, 10 in.; blade, 6 in, wide

20

No. Code Word Each 1780-Shaver style Floor Levelers \$2.75 Apace

The Shaver style Floor Levelers are used for leveling a floor in the ice house and some ice men frequently find them handy to remove uneven spots on the ice field. They are also excellent for cleaning ice from side walks.

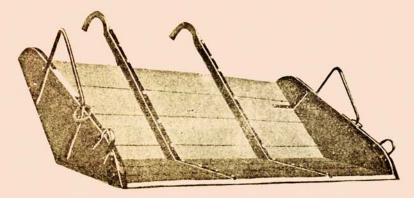
This Floor Leveler is the same as a regular ice shaver, only has an angle in socket to prevent stooping. The blade is perfectly straight on bottom side which makes a free cutting tool.



ICE ADZ.

No.					Code Word	Each
1781—Ice Adzes		15			Arret	\$4.00

The Ice Adz is also used for leveling floors in the ice house.

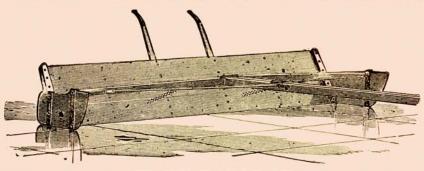


BOSTON SNOW SCRAPER.

Weight of 8 ft. Scraper, without chains, 169 lbs.

No.	Code Word	Each
170-Boston Snow Scrapers, without chains, 6 ft. long	Andiron	\$15.00
171—Boston Snow Scrapers, without chains, 8 ft. long	Aneroid	16,00
172—Chains for 6 ft. Boston Snow Scrapers	Angler	1.75
173—Chains for 8 ft. Boston Snow Scrapers	Anglo	2.00

Our Boston Scrapers are far superior to any of their kind made. We put a tapered T steel runner on the bottom to slide on, making a much lighter draft, and we also put on a concave scraping plate so as to take a good hold on the ice without lifting on the handles to make the scraper scrape clean. We make it in a very substantial manner throughout This style of snow scraper is very popular



CHAMPION SNOW SCRAPER.

Weight of team scraper, 200 lbs.

No.	Code Word	Each
174—Champion Snow Scrapers, for single horse, 71g ft. long	. Anise	\$19.00
175—Champion Snow Scrapers, for team, 10 ft, long	Ankle	20.00

The Champion Snow Scraper is the most up-to-date snow scraper on the market and is guaranteed to scrape twice as much as any of the scoop scrapers in all around scraping It is almost universally used on the Hudson river and vicinity.

List of tools for ice house equipment with estimate of cost will be furnished upon request to those desiring it.



LINE MARKER. Wedgehr 2 the

			2.53	CANALL	1 11 8 8 917					
No.									Code Word	Each
179-Line Markers		100	140	(+):		100	 (+)	- 00	Arrow	\$.90

Our Line Markers are made of tool steel, and handles are of the best quality of ash-This implement is used for the purpose of making a line, by means of a straight-edge, in which to run the first groove in laying out the ice field.



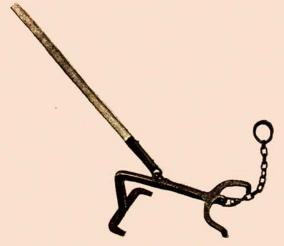
ICE SAWS.

Weight of 11 ft. saw, with case, 15 lbs.

No.											Code Word	Each
181-Ice Saws, 4 ft., without case		10					33	14		920	Babble	\$4.50
182—Ice Saws, 4 ft., with case	100			1143		6	1		1	72	Baboon	5.00
183—Ice Saws, 4½ ft., without case				2.	-					-	Baccate	4.75
184—Ice Saws, 4½ ft., with case	100		100	24		40	14		45	2.	Baize	5.25
185—Ice Saws, 5 ft., without case	100			1.6.1				-		1(4)	Balcony	5.00
186—Ice Saws, 5 ft., with case .	540		100	19		41	15		90	1/4	Ballad	5.50
187—Ice saws, 5½ ft., without case				10							Balsam	5.25
188—Ice Saws, 5½ ft., with case	106			1,91			10		*	- 19	Bandit	5.75

OUR ICE SAWS are made in the possible best manner, the blades being tempered for

long wear. They have the right shaped tooth and are beveled so as to cut very rapidly. The handles are made of best soft steel and not of malleable iron castings as most cheaper saws are made. Our saws are not second to any made.



Pole Grapple.



Jack Grapple. Weight 194bs.

No.	Code Word	Each
189-Pole Grapples, with handle	Banian	84.25
190—Pole Grapples, without handle	Banner	3.75
191-Handle and Clevis for Pole Grapple	Bannock	.75
192—lack Grapples	Bantanı	4.25

Our Grapples are made of the best materials and will stand hard usage. They are used in drawing the ice up an incline. They have a wooden handle by which to place and hold them in position and to carry them down the incline when used for crabing. Jack Grapples are used for the same purpose and preferred by some.



TOWING HOOK.

Weight, 15 lbs.

No	Code Word	Each
193—Towing Hooks	Basset	\$3.00

Towing Hooks are made entirely of steel and very stift. They are used in towing large floats of ice with a horse. They are the best implement made for this purpose.



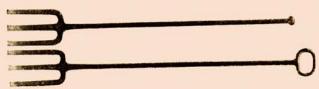
2 TINE FORK BARS.

Total Length, 4 ft. 10 in.

Heavy size: Weight, 17 lbs.; tines (outside), 14 in. long. Light size: Weight, 15 lbs.; tines (outside), 13 in. long.

No.				Code Word	Each
194-Fork Bars, 2-tined, ring handle, heavy				Cabas	\$4.25
195-Fork Bars, 2-tined, ring handle, light		10		Cacao	4.00
196-Fork Bars, 2-tined, knob handle, heavy	14		-	Cactus	4.00
197-Fork Bars, 2-tined, knob handle, light .		*		Caddice	3.75

Handles are made of 1 inch round steel.



3 TINE FORK BARS.

Total length, 4 ft. 9 in.; tines, 10 in, long; weight, 16 lbs.

No.					Code Word	Each
198-Fork Bars, 3-tined, ring handle, flat tines			10		Caddy	\$4.25
199-Fork Bars, 3-tined, ring handle, oval tines		1.0		1	Cadet	4.25
200-Fork Bars, 3-tined, knob handle, flat tines					Caftan	4.00
201-Fork Bars, 3-tined, knob handle, oval tines	-	15		12	Caique	4.00

Our Fork Bars are all made entirely of steel, and the teeth with a long taper so as to give good wedging power in the plow grooves without breaking the ice. The handles are made of 1 inch steel. Our fork bars are correct in shape and weight. These bars are very useful in breaking off the floats from the ice fields, and also for splitting the floats in strips. We make a sufficient variety to cover the demands of all harvesters.



LYNN SPLITTING BAR.

Total length, 4 ft. 8 in.; tine, 18-in. x 3-in.; weight, 18 lbs-

No.				Code Word	Each
211-Lynn Splitting Bars				Canzonet	84.25

Lynn Bars are made entirely of steel, and tempered for long service. The handle is made of 1 inch steel. This bar is preferred by some to the fork bar. It is a very handy bar and is very popular in some localities.



INSERTED TOOTH FORK BARS.

Weight of 2-tine, 81 lbs.; 3-tine, 11 lbs.; 4-tine, 131 lbs.

No. 202—Fork Bars, 2-tined, wood handle, 10-inch oval tines 203—Fork Bars, 3-tined, wood handle, 10-inch oval tines 204—Fork Bars, 4-tined, wood handle, 10-inch oval tines	31		Code Word Calends Caliph Calla	83.50 3.75 4.00
205—Fork Bars, 2-tined, wood handle, 12-inch oval tines 206—Fork Bars, 3-tined, wood handle, 12-inch oval tines 207—Fork Bars, 4-tined, wood handle, 12-inch oval tines	92	9	Calyx Camel Campanile	3.50 3.75 4.00

This style Fork Bar is the most up-to-date bar made, having several distinct advantages over other bars. All the tines are made interchangeable so that they can be inserted in case of a break. The entire tooth is made of the best quality of tool steel. The tines are made oval and with a long taper which gives them great wedging power.

The three and four tine bars are best suited for field use and the two tine makes a very handy canal bar. These bars are excellent implements in every respect.



GROOVING BAR.

Length, 4 ft, 9 in.; weight, 16 (bs, Caulking blade, 8) in. x 4) in.; Chisel blade, 8 in. x 3 in.

No.							Code Word	Each
212-Grooving Bars	-	-					Caprice	83.50

The Grooving Bar is made with a broad, blunt blade on one end and a sharp, chisel blade at the other end. The broad blade is used for breaking off large sheets after being grooved. The chisel end can be used for many purposes when a sharp edge is required. It is a very useful bar.



CAULKING BARS.

Length, 1 ft. 7 in: blade, 12 in x 5 in.

No.					Code Word	Each
213—Caulking Bars, pipe handle, weight 9 lbs.		- 1				\$2.50
214—Caulking Bars, wood handle, weight 6½ lbs.	*		*1	- 25	Capricorn	2.50

The blades of our Caulking Bars are made long and thin, suitable to caulk the deepest grooves. We furnish these caulking bars with either pipe or wood handles. The pipe handle is made of $1\frac{1}{8}$ inch steel pipe. The wood handle bar makes a very handy tool and is preferred by some. These are used to caulk the end grooves on the ice field and floats with the chips which prevents the water from running in the grooves. It is a very important tool in ice harvesting.



NEEDLE BAR.

Length, 11	1. 9 11	11.					
No.						Code Word	Each
215-Needle Bars, heavy, weight 12 lbs		-		-	23	Captive	\$2.00
216-Needle Bars, extra heavy, weight 15 lbs.			-	- 1	29	Carbine	2.25

Our Needle Bars are made entirely of steel and blade of entire tool steel and are carefully tempered for severe service. We make these bars in two weights. The handles of the heavy bars are made of 1 inch and the extra heavy of 1^{1}_{10} inch round steel. This bar works very nicely when the ice is well plowed. They are very popular in some localities.



INSERTED TOOTH NEEDLE BARS.

Times, 10 in, long,
Weight of 2-time, 31 the (2-time, 12) the

	13 1112	HE OF -	printer or to	1000							4 4 4 50 4		
No.												Code Word	Each
217-Needle Bars.	2-tined,	wood	handle		60			20	-	200		Cardiac	\$3.50
218-Needle Bars,	3-tined,	wood	handle				4			0.		Carrot	3.75
219-Needle Bars,	4-tined.	wood	handle			741		90			-	Cartel	4.00

These bars are made especially for those desiring a needle bar with more than one tine. They are an excellent bar and are preferred by many.

SPLITTING BARS



Ring Handle Splitting Bar.

Total length, 4 ft. 6 in.; weight of heavy, 1411;s.; light, 12 lbs.

SPLITTIN	GI	BAL	ts-	Con	tinue	DS			
No. 220—Splitting Bars, ring handle, heavy 221—Splitting Bars, ring handle, light			* .			9 4	3	Code Word Cony Coolie	\$2.75 2.50



Knob Handle Splitting Bar.

Total length, 4 ft. 6 in.; weight of heavy, 14 lbs.; light, 12 lbs.

No.								Code Word	Each
222-Splitting Bars, knob handle, heavy	4	27	26		4	-		Copper	\$2.50
223-Splitting Bars, knob handle, light	14			381			ж.	Copse	2.25

We make our Splitting Bars in two sizes: the heavy is made with a 1 inch round handle, and the blade is 314 inches wide and 12 inches long. The light bar has a 78 inch round handle and the blade is 234 inches wide and 11 inches long. The blades on all our Splitting Bars are made entirely of tool steel, and beveled alike on both sides. These bars are used in splitting the large floats in smaller blocks and into cakes. They are used for many purposes around the ice house and are very useful tools.



Ring Handle, Shaver Tooth, Splitting Bar.

Total length, 4 ft. 6 in.; blade, 11 in. long and 3 in. wide; weight, 14 lbs. Code Word Each 224-Splitting Bars, ring handle, shaver tooth



Knob Handle, Shaver Tooth, Splitting Bar.

Total length, 4 ft, 6 in.; blade, 11 in, long and 3 in, wide; weight, 14 lbs. Code Word Each 225-Splitting Bars, knob handle, shaver tooth Corolla \$2.75

This bar is very handy when the grooves are not of sufficient depth or have become trozen. The blade is made of entire tool steel, and the handle of 1 inch round steel.



CANAL CHISEL.

Length, 6 ft.; blade, 11 in, long and 3 in, wide; weight, 14 lbs. Code Word Each 226-Canal Chisels Fable \$2.75

These Chisels are made with a 7 inch round steel handle and the blades are made of the best quality of tool steel. They are principally used in the canal,



TAPPING BAR.

Length, 1 ft. 5 in.; blade, 12 in. long, and 11 in. wide; weight, 12 lbs.

	 	-	_					
No.							Code Word	Each
227-Tapping Bars							Fabric	\$2.50

Our Tapping Bars have a 1 inch round handle. This bar is made especially for wetting down a field of ice after it has had a fall of snow, and is also used by many ice men on the small canal for separating the cakes.



HOOK CHISEL.

Handle, 41 ft.; blade, 94 in, long; weight, 5! lbs.

No.									Code Word	Each
228-Hook Chisels	21	1	40	14	- 24	*		12	Fagot	\$3.00

The Hook Chisel is a very useful tool for the small harvester, as it can be used for either an Ice Hook or Chisel. This bar is also used at the wholesale depots for splitting up cakes.



SIEVE SHOVEL.

Handle, 1 ft. long; weight, 7 lbs.

No.							Code Word	Each
229—Sieve Shovels	ŭ.	12	277	14		÷.	Fakir	\$1.75

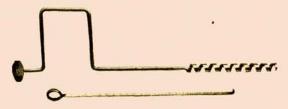


SCOOP NET.

Handle, 5 ft. long; weight, 7 lbs.

No.							Code Word	Each
230-Scoop Nets		8		3	100		Falcon	\$3.00

Sieve Shovels and Scoop Nets are both used for the same purpose, removing slush from the canal. Both are substantially made and are important tools



ICE AUGER AND MEASURING ROD.

Measuring Rod, 24 in, long Weight of Auger, 11 lbs.

No.								Code Word	Each
231—Ice Augers .	12	2	755	1767	27	77277	- 1	Fancy	\$3.50
232—Measuring Rods				 : :1	- 1	1 12	- 1	Farina	.50

The Auger and Measuring Rod are used in ascertaining the thickness of ice. They are made of the best materials and will give long service.



ELEVATOR FEEDING FORK.

	Hand	le, 7 ft	. lons	g; weis	tht, i	4 lbs.		at the Williams	Line of the
No.								Code Word	
233-Elevator Feeding Forks				197				Filbert	\$1.50

Elevator Feeding Forks are used to feed the elevator. We make them first-class in every respect. Made with handle 7 feet long. Any length put on to order.



ICE TOOL GRAPPLE.

		V	Veigh	t. 5 lbs	S				
No.								Code Word	Each
								Fulcrum	83.00
234—Ice Tool Grapples	124	1.0		100	9.0	 (a)	1.0	1 thertain	40.00

This Grapple is a very handy tool for recovering ice tools which have been dropped in the water. The springs are stiff and will hold the tool firmly.

ICE HOOKS

3 to 18 feet long.



Car Ice Hook. Weight of 4 ft., 40 lbs, per doz.

No.		0177					***				Code Word	Per Doz.
235-3 ft. Car Ice Hooks	40		10				(6)		110		. Haddock	\$11.50
236-316 ft. Car Ice Hooks				14		40		100			Haiser	11.75
237-4 ft. Car Ice Hooks			54		47				0.90		. Halyard	12.00
238-412 ft. Car Ice Hooks		+1		77.0						(.0)	Hamlet	12.25

Car Hooks are made the same as the regular ice hooks with the exception of a band iron which extends 18 inches down the handle from the shover. This strengthens and protects the handle for car use.



5 ft. Ice Hook, Regular Pattern. Weight, 40 lbs. per doz.

ICE HOOKS—Continued

No.									Code Word	Per Doz
Regular Pattern 239—3 ft. Ice Hooks			*						Hamper	\$9.00
240—3½ ft. Ice Hooks 241—4 ft. Ice Hooks	 *	24		5	*	2.1		÷	Hamster Hanson	9.00 9.25
242-4½ ft. Ice Hooks 243-5 ft. Ice Hooks	8					9		20	Harbinger Harebell	9.50 10.00
244—6 ft. Ice Hooks	12	0.00		0	13	 Ŷ.	•		Harlequin	10.50



Canal Ice Hook.

Weight of 7 ft., 55 lbs. per doz.

No.												Code Word	Per Doz.
245-7 ft. Ice Hooks, can	al				-	- 23		7.		27		Harpoon	\$11.00
246-8 ft. Ice Hooks, can				1								Harvest	12.00
247-10 ft, Ice Hooks, can			100		27	4		160				Hassock	14.00
248-12 ft. Ice Hooks, can		42		-							43	Havelock	16.00
249-14 ft. Ice Hooks, can	al		3		- 50	-		100		(4)		Hazel	18.00
250-16 ft. Ice Hooks, can	al	-		100			53		***			Hectare	20.00
251-18 ft. Ice Hooks, can	al		1.6			0.4				9		Helmet	22.00
Boston Pattern													
252-3 ft. Ice Hooks												Hemlock	9.00
253-316 ft. Ice Hooks										100		Heptagon	9.00
254-4 ft. Ice Hooks												Heriot	9.25
255-416 ft. Ice Hooks	- 0			- 141							9	Hermit	9.50
256-5 ft. Ice Hooks		ň		(8)								Hero	10.00
257-6 ft. Ice Hooks .	- 6	ě		G.			12		4			Herring	10.50

Our Ice Hooks are made of a special steel and laid heavily with fine quality of tool steel especially adapted for this particular purpose. We pay strict attention to have our handles of the best quality, second growth ash, correct in size and shape. Our ice hooks are unexcelled in finish and durability and are made to give long service. We make our Canal Ice Hooks with the best quality turned ash handles only, and with pullers shorter than those on the regular stowing hook. The ice hook is one of the most important implements in the harvesting and handling of ice, and it is very important to the ice harvester to have the best made.

Our ice hooks will meet the exact requirements of the experienced ice handler who wants a hook with proper temper and shape for his work.

We have in stock two styles of Hooks: The New York pattern with a narrow point, and the Boston pattern with its wide point.



Regular Pattern Puller. Weight, per doz., 10 lbs.



Boston Pattern Puller. Weight, per doz., Il lbs.

No 260

261

No.				Code Word	Per Doz.
258—Pullers for Ice Hooks, regular pattern 259—Pullers for Ice Hooks, Boston Pattern			4	Hyacinth Hydra	\$4.50 4.50



Pusher. Weight, per doz., 54bs.



Band. Weight, per doz., 11b.

)					Code Word	Per Doz.
0-Pushers for Ice Hooks					Hydromel	\$2.75
1—Bands for Ice Hooks					Hyemal	.35





Countersunk Head Rivet. Weight, 41 to 11b.

Flat Head Rivet.	
Weight, 42 to 14b.	

No.			
			100
262—Rivets 263—Rivets	s for Ice Hooks, countersunk head s for Ice Hooks, flat head		





CANT ICE HOOK.

Waight of 1 ft Cant Hooks 16 the overdos

W Cigi	IC OI	1.11. 6.11	THE PART	MINE	40.10	D. 156	I HOY		
No.								Code Word	Per Doz.
264-4 ft. Cant Ice Hooks								Hickory	\$16.00
265-41 ft. Cant Ice Hooks								Hobby	16.25
266-Cant Hooks, unattached					20		133	Honey	6.00

Our Cant Hooks are made of the best material and are carefully tempered. They are mostly used to edge up ice when packing into houses or barges.

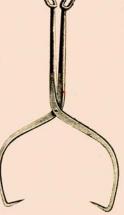


CAR ICING HOOK.

Weight of 5 ft. Car Jeing Hooks, 60 lbs. per doz.

No.					Code Word	Per Doz.
267-5 ft. Car leing Hooks					Hornet	\$21.00
268-51 ft. Car leing Hooks				-2	Hussar	21.00

Our Car Icing Hooks are made with a tapered square steel breaker, 6½ inches long This breaker is made of the best tool steel and tempered for severe service. We forge these hooks in one piece and they are made with a socket to take the full size wood handle.



DRAG TONGS.

Our Drag Tongs are made entirely of steel, and with long handles. They are used for stowing in the ice house, boat or cars. They are first-class implements. We furnish these tongs with either solid or large hollow handles, as desired.

Weight, with solid handles, 7½ lbs. Weight, with hollow handles, 7 lbs.

No.					Code Word	Per Doz.
Solid Handle 269—Drag Tongs 270—Drag Tongs, heavy	174	ä	- 17	ē	Macaroon Macaw	\$21.00 22.00
Hollow Handle 271—Drag Tongs 272—Drag Tongs, heavy	12	ě	20	2	Machine Mackerel	23.00 24.00



Hoisting Tongs.



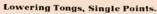
Vaulting Tongs.

Our Hoisting and Vaulting Tongs are made of a special steel which we have made for this particular purpose so as to stand the hard work to which they are subject. Our hoisting tongs are superior to any made, for lightness, strength and durability.

We have a "knack" in making our hoisting tongs which others have been unable to imitate. Our tongs are not equalled in any respect.

No.		Weight	Code Word	Each
	Tongs, light Tongs, medium Tongs, heavy		Magi Magnet Maise	\$5.00 5.00 5.00
282—Vaulting	Tongs,	12 lbs.	Manna	4.00







Lowering Tongs, Double Points.

No. Single Point. W 276—Lowering Tongs, 277—Lowering Tongs, 278—Lowering Tongs,	14 in. 17 in.	. 8				Code Word Malaga Malice Mallet	\$2,00 2,00 2,00
Double Points. 279—Lowering Tongs, 280—Lowering Tongs, 281—Lowering Tongs,	Weight 14 in. 17 in.	of 21 i	n., 81bs	 a de		Manacle Mandate Manila	2.75 2.75 2.75 2.75



Market Tongs, Single Points.



Market Tongs, Double Points.

No.			Weight	Code Word	Each
283-Market Tongs, single point			8 lbs.	Manse	83.00
284-Market Tongs, double point			10 lbs.	Maple	3.75

Market and Lowering Tongs are made for hoisting or lowering ice where there is only a small space overhead. These tongs are made of steel, and strong enough for ordinary hoisting. They are light to handle, and make a good tong for this purpose.



EDGING UP TONGS.

Utah Pattern. Weight, 41bs.



No.					Code Word	Per Doz.
Eastern Pattern 285—Edging up Tongs, solid handle, 26 in. 286—Edging up Tongs, hollow handle, 26 in.				*	Marble Marigold	\$16.00 18.00
Utah Pattern 287—Edging up Tongs, solid handle, 19 in. 288—Edging up Tongs, hollow handle, 19 in.		2			Marsh Martinet	16.00 18.00

Our Edging up Tongs are made entirely of our special ice tong steel, with large swelled, hollow handles. These tongs are used by packers who edge up their ice when packing.

SUMMER BARS

Our Summer Chisel Bars are made with a polished steel handle, the heavy is $1\frac{1}{8}$ in. in diameter, and the medium 1 in. in diameter. The entire blade is made of the finest quality of tool steel, carefully tempered for long service. There are no bars any better made than ours.



Regular Summer Bar.

Medium—Weight, 15 fbs.; blade 10 in. x 1½ in.; total length, 4 ft. 5 in. Heavy—Weight, 17½ fbs.; blade 10½ in. x 5 in.; total length, 4 ft. 5 in.

No.					Code Word	Each
289-Summer Bars, regular style, medium		10	19	100	Naive	\$5.00
200—Summer Bars, regular style, heavy	10				Nankeen	5.00

The regular Summer Bars are made with a curved blade and are suitable for cutting around and lifting up the cakes in the house. They are the most commonly used bar for summer use in the house.



Cutting Down Summer Bar.

Weight, 177 lbs.; blade, 12 in. x 47 in.; total length, 1 ft. 2 in.

No.				Code Word	Each
291—Summer Bars, Cutting down	1.25			Narcissus	85.00

The Cutting down Summer Bar is made with a slight curve and is used only for cutting around the cakes in the house.



Lifting Up Summer Bar.

No. Weigh	it, 18) 108.; blade.	12 m. x - m	.: total length	Code Word	Each
292-Summer Bars, Lif	ting up			Necklace	85,50

The Lifting up Summer Bar is made similar to the regular, only it has a longer blade. Its principle use is for striking under and loosening up the cakes, but it can be used for cutting around the cakes in the house. This is a very popular bar on the Hudson River and is sometimes called the Hudson River Lifting Up Bar.

J. G. BODENSTEIN & CO.-ICE TOOLS

35

Striking Under Bars are made to start up the cakes in the house after they have been cut around with the cutting down or regular summer bar. These bars are curved so as to prevent stooping. We make two styles of striking under bars: Western and Eastern. These bars are made of steel throughout and blades of entire tool steel carefully tempered for a keen cutting edge.



Western Pattern Striking Under Bar.

Weight, 16) 1bs.; blade, 11 in. x 3) in.; total length, 4 ft. 7 in. Code Word Each 293-Striking Under Bars, Western Pattern Nisan 83.50

The Western Pattern Striking Under Bar is made with a decided curve at the blade. perfectly straight on bottom with slight taper on top.



Eastern Pattern Striking Under Bar.

Weight, 161 lbs.; blade, II in, x25 in.; total length, 4 ft, 7 in,

No.		Code Word	Each
294—Striking Under Bars, Eastern Pattern		Nimbus	83.50

The Eastern Pattern Striking under Bar has not such a decided curve at the blade as the Western pattern but has a gradual curve from cutting edge to bend of blade.



PACKING CHISEL.

Length, 4 ft. 7 in.; blade, 12 in. x 41 in.; weight, 151 lbs. Code Word Each Noble \$3.50 206-Packing Chisels

These chisels have a steel handle and the blades are made of the best tool steel, carefully tempered. They are a very convenient bar for packing ice and are also used for cutting around the cakes when taking the ice out of the house.



SEPARATING CHISELS.

Length, 4 ft. 6 in.; blade, 16 in. x 3) in.; weight, 14 lbs.

No.					Code Word	Each
297—Separating Chisels, ring handle		i i			Nones	\$3.00
298-Separating Chisels, knob handle	-		40	14	Nugget	2.75

The blades of our chisels are made entirely of the best tool steel and are carefully tempered for long service. Our bars will wear much longer than those made of iron and just the cutting edge laid with steel. This feature, embodied with the correct shape and weight, makes our bars unsurpassed.



CRESCENT ICE SAW.

No.				Code Word	Each
299-Crescent Ice Saws				Oak	\$18.00

The Crescent Ice Saw is used by many ice men who speak very highly of it. This saw is made of the finest quality of steel, and is used for sawing out cakes of ice which have become frozen together in the house. It is a most satisfactory tool for this purpose.



CHIP SLEIGH.

Pan, 4 ft. long, 2 ft. 4 in, wide, 48 in, deep; capacity, 300 lbs.; weight, 50 lbs.

No.					Code Word	Each
300—Chip Sle	ighs				Oasis	825.00

Our Chip Sleighs are of an improved model and are made in a good substantial manner. The runners are made of T steel, well braced so as to stand severe use. The pan is made of heavy galvanized steel and bound throughout with L steel. The bail is made so that it can be either drawn or pushed.

The chip sleigh is used to remove ice chips in the house and dump out of doorway It is a great convenience in the larger ice houses



SCOOP SHOVEL.

No.						Code Word	Per Doz.
301—Scoop Shovels, No. 5 302—Scoop Shovels, No. 6				174		Opelisk Occident	\$9.00 9.25
303—Scoop Shovels, No. 7				131	*0	Ocean	9.50



GALVANIZED PERFORATED SCOOP.

124	 	 			
No.			Code Word	Per Doz-	
304—Galvanized Perforated Scoops	* 1	19.1	Ogee	\$15,00	

Our Shovels are of the hollow back style with wide mouths. They are good, serviceable implements and will give perfect satisfaction.



ICE HOUSE SAW.

	weign	t. 6 (bs.:	iength c	of blade.	42 111.		
No.						Code Word	Encil
305—House Saws					1.	Olive	\$3.50

This Saw is principally used in the house where the cakes are packed so closely together that they cannot be separated with a chisel without breaking.



Hand Saw, Guard Iron Handle, 30 in. Weight, 31 lbs.: blade, 30 in. long.

No.					Code Word	Each
809-Hand Saws, guard iron handle, 26 in.	100				Opal	\$1.20
310—Hand Saws, guard iron handle, 30 in.		*/			Opera	1.25
311—Hand Saws guard iron handle 36 in					Oracla	1.40

HAND ICE SAWS-Continued

No.					Code Word	Each
306-Hand Saws, wood handle, 26 in.	-				Omega	\$1.20
307-Hand Saws, wood handle, 30 in.					Omen	1.25
308-Hand Saws, wood handle, 36 in.			-		Onyx	1.40



Hand Saw, Oval Iron Handle, 30 in.

No. Weight, 15 fbs.; blade, 30 m. long.	Code Word	Each
312—Hand Saws, oval iron handle, 26 in.	Orange	-\$1.20
313—Hand Saws, oval iron handle, 30 in.	Orchard	1.25
314—Hand Saws, oval iron handle, 36 in.	Organ	1.40

Our Hand Saws we can furnish with three different styles of handles, the wood, and guard or oval iron. The blade is made of best saw steel, with right temper for long service. This saw is used by some ice men in preference to the ice axe. Our Saws are first class in every respect.

ICE AXES

Our Ice Axes are laid with the best tool steel, and carefully tempered so as to guarantee a good cutting edge and long service. The weight we give on our ice axes does not include the handle. Our axes are as good as skill can make them and they are not surpassed in finish or beauty of shape.



New York Pattern Axe.

No.	Code Word	Per Doz.
315—Axes, 3 lb., square bit, 7 in. x 256 in., 28 in. handle	Pacha	\$18,00
316—Axes, 4 lb., square bit, 7% in. x 3 in., 30 in. handle	Pacific	20,00
317—Axes, 5 lb., square bit, 8 in, x 31 ₄ in., 32 in, handle	Packet	21.00
318—Axes, 6 lb., square bit, 8^{1}_{2} in $\times 3^{3}_{1}$ in., 34 in handle	Paddle	22.50



Philadelphia Pattern Axe.

ICE AXES-Continued

No.	(')	ode Word	Per Doz.
320-Axes, 4 lb., wit	in point, round bit, 7 in. x 25_8 in., 28 in. handle in point, round bit, 7^{1_2} in. x 2^{7_8} in., 30 in. handle in point, round bit, 8 in. x 3 in., 32 in. handle	Padlock Pageant Palace	\$18.00 20.00 21.00



Philadelphia Pattern Axe.

No.	Code Word	Per Doz.
322-Axes, 3 lb., without point, round bit, 7 in. x 25% in., 28 in. han	dle Palatine	\$18.00
323—Axes, 4 lb., without point, round bit 7½ in. x 2½ in., 30 in. he		20.00
324-Axes, 5 lb., without point, round bit, 8 in. x 3 in., 32 in. hand		21.00



Boston Pattern Axe.

No.		Code Word	Per Doz
325-Axes, 4 lb., square bit, 8 in. x 134 in., 30 in	handle .	Pansy	\$20.0



Chicago Pattern Axe.

No.	Code Word	Per Doz.
326—Axes, 4 lb., round bit, 8 in. x 2½ in., 28 in. handle	Panther	\$20.00
327-Axes, 4 lb., wide blade, round bit, 8 in. x 278 in., 30 in. hdl.	Pantry	20,0



Southern Pattern Axe.

No.	Code Word	Per Doz.
328-Axes, 21a lb., round bit, 21a in. wide, 20 in. handle	Parable	\$17.00
320-Axes, 312 lb., round bit, 212 in wide, 24 in handle	Parasol	18.00

ICE AXES-Continued





Southern Pattern Hatchets.

No.	Code Word	Per Poz.
330—Hatchets, 2 lb., square bit, 2 in. wide, 16 in. handle	Parlor	\$15.00
331—Hatchets, 24, lb., round bit, 24, in. wide, 18 in. handle	Patriot	16.00
332—Hatchets, 21, 1b., square bit, 214 in wide, 18 in. handle	Peacock	16.00



Washington Pattern Hatchet.

No. 333—Hatchets, 2^{4}_{4} lb., round bit, 6 in. x 2^{4}_{2} in., 16 in. handle 334—Hatchets, 2^{2}_{2} lb., round bit, 6^{4}_{2} in. x 2^{3}_{4} in., 18 in. handle 335—Hatchets, 2^{3}_{4} lb., round bit, 7 in. x 3 in., 18 in. handle	Penny Peony Piano	Per Poz. \$16,00 16,00 16,00
336—House Axes, heavy, 7 lb., bit 6½ in. wide, 24 in. handle 337—House Axes, light, 6½ lb., bit 6 in. wide, 24 in. handle 338—Tanning Axes, 6 lb. bit 3 in. wide, 32 in. handle	Pilot Plum Plutarch	36,00 35,00 24,00



Plain Handle.



Iron End Handle.

SPLITTING AWLS.

No.		Code Word	Per Doz.
339—Splitting Awls, plain handle, 3-16 in, steel		Prison Pumpkin	\$1.50 2.00
340-Splitting Awls, iron end handle, 13 in. steel		типрки	-11/11

Our Awls are made of the best tool steel and carefully tempered their entire length for severe service. They are not to be compared with the ordinary awls on the market.

We can furnish awls with any size needle point, to order. Guaranteed to give perfect satisfaction. (See our guarantee, page 3).



Splitting Awl Sheath.

Chopper.

No.						Code Word	Per Doz.
341—Splitting Awl Sheaths					20.1	Pupil	\$4.00
342—Choppers						Purse	2.00

ICE SHAVERS

The blades of the wood handle shavers are made of the same material as the blades of our regular pipe handle shavers. We furnish them in two styles: D handle in 24 and 42 inch lengths and the long knob handle in 47 inch length. These shavers are preferred by some ice men.



D Handle Ice Shaver, 4 Teeth.

Length, 3 ft. 6 in.; weight, 4 lbs.

No.	Wood handle, 4 teeth			Code Word	Per Doz.
343-lee Shaver	s, 24 in., D handle, ground on one side	14	-	Rabbit	\$18.00
	s, 42 in., D handle, ground on one side	43		. Racket	\$18.00



Knob Handle Ice Shaver, 4 Teeth-

Length, 3 ft. II in.; weight, 3) 1bs.

No.	Wood handle, 4 teeth	Code Word	Per Doz
3440—Ice Shavers	, 47 in., knob handle, ground on one side	Radicle	\$18.00

Our Improved Steel Pipe Handle Ice Shavers are the most practical ice shavers made. They are forged in one piece, having no joints to dry out and get loose, or no slivers to injure the hands, and they are not as easily broken as the wood handle shavers.

The handle of this shaver is made of the best quality steel pipe, the blade of the finest quality tool steel and carefully tempered for long service. The teeth are highly polished and handle nicely painted. This style of shaver we have made for several years and its popularity has been proven by the great increased demand for them. (See our guarantee, page 3).

J. G. BODENSTEIN & CO.-ICE TOOLS

ICE SHAVERS-Continued



Ring Pipe Handle Ice Shaver, 4 Teeth.

Length, 3 ft. 4 in.; weight, 4 lbs.

No.	Pipe handle. #teeth			Code Word	Per Doz.
345—Ice Shaver	rs, 24 in., ring handle, ground on one side	41	a	Radish	\$13.50
	rs, 24 in., ring handle, ground on both sides	61		Rainbow	13.50
	rs, 40 in., ring handle, ground on one side	*11		Raisin	13.50
348lce Shaver	rs, 40 in., ring handle, ground on both sides			Ramrod	13.50

The handles are made of steel pipe, 7-8 in. dia, with a swelled, hollow ring, as used on hand ice tongs.



Ring Pipe Handle Ice Shaver, Long Teeth.

Length, 3 ft. 4 in.; weight, 4 lbs.

No.	Pipe handle, 4 teeth			Code Word	Per Doz.
349-lce Shavers,	40 in., long teeth, ground on one side		12	Rattan	\$15.00
3490-lee Shavers,	40 in., long teeth, ground on both sides	1.0		Ratteen	15,00

The teeth of these shavers are 3 inches long, which gives one inch more wear and temper than the regular pipe handle shaver. The teeth being longer, makes a more rapid and easier cutter. Handle is made of steel pipe 7-8 in. dia., with a swelled ring, same as on our swelled handle ice tongs. This makes it easy for the hands.



Ring Pipe Handle Ice Shaver, 5 Teeth.

Length, 3 ft. 6 in.; weight, 5 lbs.

No.	Pipe handle, 5 teeth	Code Word	Per Doz.
350—Ice Shavers	, 42 in., ring handle, ground on one side	Razor	\$23,00
351—Ice Shavers	, 42 in., ring handle, ground on both sides	Ream	23,00

The handles on these shavers are made of steel pipe, 11_n in. dia., with a swelled ring handle, same as on Nos. 349 and 3490.



Knob Pipe Handle Ice Shaver, 5 Teeth.

Length, 1 ft.; weight, 5: 1bs.

No.	Pipe handle, 5 teeth	Code Word	the Phoz.
352-Ice Shavers.	48 in., knob handle, ground on one side	Rebel	823.00
353-lee Shavers,	48 in., knob handle, ground on both sides	Rebus	23,00

The handles are made of steel pipe, 11_6 inches dia., with a knob 17_6 inches in diameter

ICE SHAVERS-Continued



Ring Pipe Handle Ice Shaver, 7 Teeth.

Length, 3 ft, 6 in.; weight, 51 lbs.

No. Pipe handle, 7 teeth Code Word Per Doz. 354—Ice Shavers, 42 in., ring handle, ground on one side Redan \$28.00

We put a 11₈ inch steel pipe handle on these shavers with a swelled ring, same as on our long tooth shavers No. 349 and 3490.



Knob Pipe Handle Ice Shaver, 7 Teeth.

Length, 4 ft.; weight, 65 lbs.

No. Pipe handle, 7 teeth Code Word Per Poz. 355—Ice Shavers, 48 in., knob handle, ground on one side Reed \$28.00

Handles are made of 11g inch steel pipe with a knob 17g inches in diameter.



Knob Pipe Handle Ice Slusher, Fine Teeth.

Length, 3 ft. 8 in.; weight, 51 lbs.

No. Pipe handle, fine teeth Code Word Per Doz. 356—Ice Slushers, 44 in., knob handle, ground on both sides Refuge \$23,00

Slushers and shavers are mostly used for the same purpose but the slushers have much finer teeth than the shavers. We put steel pipe handles on our slushers 11_R inches in diameter, with a knob 17_R inches in diameter.



ICE CLEAVER.

Weight, 3; ths.

Xo Code Word Each 357— Ice Cleavers Regime \$2.50

The Ice Cleaver is now becoming a prominent wagon tool and is used quite extensively by dealers in Artificial Ice, it taking especially, the place where wagon saws have been used

ICE BREAKERS



D Handle Ice Breaker.

Total length, 3 ft. 7 in.; length of tines, 7% in.; weight, 5% lbs.

No.			Code Word	Per Doz.
358-Breakers, D handle			kegatta	\$36,00



Long Handle Breaker.

Total length, 4 ft.; length of times, 7% in ; weight, 5% lbs.

No.			Code Word	Per Doz.
359-Breakers, long handle			Regent	\$36,00

Our breakers are made of the best materials, the tines are laid with the finest tool steel and carefully tempered. They are so made that they can be used for breaking coarse lumps or scaling fine pieces and are very rapid cutters. These breakers are very popular in fish markets.



Galvanized Handle Breaker.

Fotal length, 3 ft. 1 in.; length of times, 77 in.; Weight, 71 lbs.

No.	Code Word	Per Doz.
3500—Breakers, galvanized pipe handles	Reginum	\$42,00

This is an extra heavy breaker. The handles are made of galvanized pipe, $1^3\pi$ inches in diameter. We recommend this breaker for severe service, the handles being made of galvanized pipe prevents them from rusting.

PLAIN RUBBER APRONS.

No.	Code Word	Each:
360-Rubber Aprons, medium weight, 44 in.	Register	81.75
361—Rubber Aprons, medium weight, 46 in.	Reglet	1.75
362-Rubber Aprons, medium weight, 48 in	Reigle	1.75

These Aprons are made of good material and are usually worn in front in the regular manner of ordinary aprons.



No. 364—Refrigerator Blocks, two double Code word, Relay. Per Pair \$3.00

Our Refrigerator Blocks are made of the best of material. They are light, strong and have roller bearings. These blocks are very compact and will hoist as close to a ceiling as possible. Use 9-16 or 5-8 inch rope.



REFRIGERATOR BLOCKS.

Retrigerator Blocks.

1 Single and 1 Double
Distance between hooks, 13 in.

Refrigerator Blocks. 2 Double Distance between hooks, 13 in.



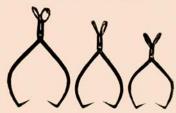


SHOES.

Plain	Shod	
No.	Code Word	Per Pair
365-Wooden Sole Shoes, plain, sizes 7, 8, 9, 10, 11, 12	. Relfe	\$2.00
366-Wooden Sole Shoes, shod, sizes 7, 8, 9, 10, 11, 12	. Relic	2.25

This style of shoe is used in artificial ice plants, natural ice houses and creameries. They have advantages over the ordinary shoes for this purpose.

HAND TONGS



New York Pattern.

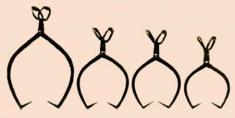
The Hand Ice Tong is one of the most important tools used by the ice man, and it is

very necessary that it should be the very best. We manufacture the very best tong to be made. We use only the best materials, and with an up-to-date method of manufacturing, we are enabled to produce the highest quality obtainable.

The steel used in our regular grade ice tongs is made specially for us, and not only do we temper each point for long service but treat the entire tong to the joint, and by doing this we get an extra stiff tong, not obtainable any other way. There are no tongs better than ours at any price.

All our large swelled hollow handles are made of a fine quality of steel pipe, $\frac{7}{8}$ inch in diameter. We especially shape these handles so that the swelled part conforms to the shape of hand when closed. Our handles will not cut the hands like those of a circular shaped top. This is a feature embodied in our tongs. (See our guarantee, page 3.)

No. New York Pattern Tongs, Plain Solid Handles.	Code Word	Per Doz.
367—New York Tongs, 17 inches, (light) 29 lbs. doz	Relish	\$ 9.00
368—New York Tongs, 17 inches, 36 lbs. doz	Remedy	10.00
369—New York Tongs, 20 inches, 47 lbs. doz	Remnant	12.00
370—New York Tongs, 24 inches, 59 lbs. doz	Remsen	15.00
New York Pattern Tongs, Large Swelled, Hollow Handles.		
371—New York Tongs, 1416 inches, 35 lbs. doz	Remora	12.25
372—New York Tongs, 161g inches, 38 lbs. doz	Remus	12.50
373—New York Tongs, 1912 inches, 45 lbs. doz	Rental	15.00
374—New York Tongs, 24 inches, 57 lbs. doz	Replica	18.00



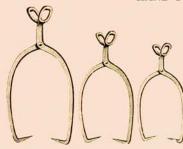
Boston Pattern.

The Boston Pattern hand tongs, we make in two grades—extra and standard. The Extra Grade—We make the bows and points of entire tool steel of the best quality and with large, swelled, hollow handles.

The Standard Grade—The entire body and points of these tongs are made of our special made ice tong steel. This is a very fine grade of steel and with our method of manufacture, our tongs are unsurpassed in quality and finish. For severe service we consider these tongs to be as good as the extra grade in every respect. All Boston Pattern Tongs are made only with our large swelled, hollow handles.

No. Boston Pattern Tongs, Standard.					Code Word	Per Doz.
375-Boston Tongs, 13 inches, 36 lbs. doz					Reptile	\$13.00
376—Boston Tongs, 1436 inches, 40 lbs. doz.				20	Republic	13.50
377—Boston Tongs, 1616 inches, 45 lbs. doz	27				Reredos	14.00
378—Boston Tongs, 24 inches, 60 lbs. doz		7			Reservoir	16.00
379—Boston Tongs, 26 inches, 66 lbs. doz	102		1		Resident	17.00
Boston Pattern Tongs, Extra.						
380-Boston Tongs, 13 inches, 35 lbs. doz		10			Resin	17.50
	727				Retina	18.00
382—Boston Tongs, 161/2 inches, 44 lbs. doz.					Retinue	18.50

HAND TONGS-Continued



These tongs have large swelled hollow handles only, the body and points are made entirely of our special tong steel. They are true to pattern, light and very strong.

The span measurements of our tongs are given in inches, when the tongs are opened as wide as possible.

Philadelphia Pattern Tongs.

No.	Code Word	Per Doz.
383 - Philadelphia Tongs, 14 inches, 36 lbs. doz.	Reveille	\$15.00
384—Philadelphia Tongs, 17 inches, 39 lbs. doz.	Revel	16,00
385—Philadelphia Tongs, 23 inches, 43 lbs. doz.	Revenue	18.00



BUFFALO PATTERN TONGS.

We make this style tong of entire steel, and with our regular large swelled, hollow handles. We can furnish this style tong either polished or painted. The painted tongs list at \$5.00 per dozen less than the polished tongs.

No.		Code Word	Per Doz.
386—Buffalo Tongs, 12 in., polished, 34 lbs. doz. 387—Buffalo Tongs, 12 in., painted, 34 lbs. doz. 388—Buffalo Tongs, 14 in., polished, 37 lbs. doz. 389—Buffalo Tongs, 14 in., painted, 37 lbs. doz. 390—Buffalo Tongs, 18 in., polished, 43 lbs. doz. 391—Buffalo Tongs, 18 in., painted, 43 lbs. doz.		Rhetoric Rhubarb Ribbon Rice Ridotto Ritual	\$18,00 13.00 18.50 13.50 20,00 15.00



Cincinnati Pattern longs.

No.	Code Word	Per Doz
392—Cincinnati Tongs, 10 in., 27 lbs. doz. 393—Cincinnati Tongs, 12 in., 30 lbs. doz. 394—Cincinnati Tongs, 15 in., 34 lbs. doz.	Rival River Robin	\$11.00 11.50 12.00

KANSAS CITY PATTERN TONGS.

No	Code Word	Per Doz
395-Kansas City Tongs, 10 in., 27 lbs. doz.	Roca	\$11.00
396-Kansas City Tongs, 12 in., 28 lbs. doz.	Rocket	11.50
397-Kansas City Tongs, 15 in., 30 lbs. doz.	Rodent	12.00

The Cincinnati and Kansas City pattern ice tongs are similar and both are made of the best quality of material. Each have their friends in the vicinity of the cities from which their names are taken

HAND TONGS-Continued



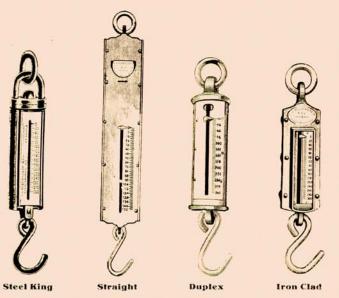
New London Pattern Tongs.

No.				Code Word	Per Doz.
398-New London Tongs, 13 in., 32 lbs. doz.	-		+:	. Roelyn	\$17.50
399-New London Tongs, 141g in., 36 lbs. doz.		100		Rogue	18.00
400-New London Tongs, 16 in., 40 lbs. doz.	1.6		10	Roman	18.50

The New London Tongs are made with large swelled, hollow handles and the bows are shaped like the Kansas City and Cincinnati tongs.

No.		Code Word	Per Doz.
401-Providence Tongs, T-handle, made to order		Rondeau	
402—Car Hand Tongs, 10 in.,	9	Rosarv	17.50
403-Car Hand Tongs, 12 in.,		Ruffian	18.00

ICE SCALES



The Steel King Ice Scale is made entirely of steel, and has no castings or screws. It is a well known scale.

ICE SCALES—Continued

The Straight Scale is largely used where ice is weighed by 1 and 2 lb, marks. It is substantially made.

The Duplex Scale has a wrought iron jacket and two dial faces. This is a very popular style scale, and is thoroughly made throughout.

The Iron Clad Scale is made with a malleable iron jacket. It has been on the market or a long time and has proven a very satisfactory scale. It is extensively used in some localities.

"STEEL KING"

No. 404—Ice Scales, 405—Ice Scales, 406—Ice Scales, 407—Ice Scales,	200 lbs. by 2 300 lbs. by 5	lb				ode Word Sable Sachem Saddle Sagamore	83.00 3.00 3.25 3.50
			"STRAIG	GHT"			
408—Ice Scales, 400—Ice Scales, 410—Ice Scales, 411—Ice Scales, 412—Ice Scales, 413—Ice Scales, 414—Ice Scales,	100 lbs, by 1 125 lbs, by 1 150 lbs, by 1 200 lbs, by 2 250 lbs, by 2	Ib. Ib. Ib. Ib. Ib. Ib. Ib.				Sago Salad Sanctum Sandal Sanscrit Sapphire Saracen	\$1.00 1.75 2.00 2.50 3.00 3.25 3.50
			"DUPL	EX"			
416—Ice Scales, 417—Ice Scales, 418—Ice Scales, 419—Ice Scales, 420—Ice Scales,	200 lbs. by 5 300 lbs. by 2 300 lbs. by 5	1b. 1b. 1b.				Sassafras Satin Saturn Scarlet Sceptic	\$3.00 2.50 3.75 2.75 3.00
			IRON C	LAD"			
421—Ice Scales, 422—Ice Scales, 423—Ice Scales, 424—Ice Scales, 425—Ice Scales, 426—Ice Scales, 426—Ice Scales,	160 lbs, by 2 200 lbs, by 2 200 lbs, by 5 300 lbs, by 5 400 lbs, by 5	lb. lb. lb. lb.				Scholar Scythe Scal Scaweed Scdan Schate Schior	\$2.00 2.00 2.75 2.00 2.50 2.75 3.50
		"ICE BE	AMS A	ND POIS	ES"		
427—Ice Scales, 428—Ice Scales,						Senna Sentry	\$3.75 4.00





SELF-LUBRICATING GINS.

Upper Gin.	Lower Gin.											
Weight of 42 in, size, 344° s.	Weight of 12 in, size, 50 lbs.											
No. Upper Gins											Code Word	Each
429—Self-Lubricating Gins, 8 in.		14.				9				2.5	Sepal	83.25
430—Self-Lubricating Gins, 10 in.											Seraph	4.00
431—Self-Lubricating Gins, 12 in.										4.1	Servant	5.00
432—Self-Lubricating Gins, 14 in.											Settee	6.00
433—Self-Lubricating Gins, 16 in.											Seaton	7.00
Lowertins												
434—Self-Lubricating Gins, 8 in.					-		(+)				Shark	3.75
435—Self-Lubricating Gins, 10 in.											Sheriff	4.50
436—Self-Lubricating Gins, 12 in.											Shield	5.50
437—Self-Lubricating Gins, 14 in.											Sibyl	6.50
438—Self-Lubricating Gins, 16 in.	72				į.						Slavie	7.50

The Self-Lubricating Gins are made with wrought iron guard straps. They can be run at high speed without the use of oil, being self-lubricating, and are always ready for use. The Lower Gins have the ball and socket joint.



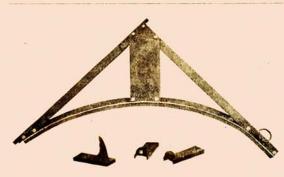


SHEAVE WHEELS.

Self-Lubricating Sheave Wheel.	Anti-Friction Sheave Wheel.
Weight of 12 in., 48 4bs.	Weight of 42 in., 9½ lbs,

and the same of th			
No-		Code Word	Each
439-S. L. Sheave W	heels, 8x158x3, in. hole, for 3, to 114 in. rope	Smilax	81.25
440-S. L. Sheave W	heels, $10x1^3 \cdot x^3$ in hole, for 1 to 1^3 in rope	Soffit	1.75
H1-S. L. Sheave W	heels, $12x2x^{7}$ in, hole, for 1 to 1^{4} in, rope	Solace	2.50
442-S. L. Sheave W	heels, $14x2^{1}4x1$ in, hole, for 1 to 1^{1} in, rope	Solfa	3.00
443-S. L. Sheave W	heels, $16x2^{1}$ x1 in, hole, for 1 to 1^{3} in, rope	Sonata	3.75
444—Anti-Friction Sh	eave Wheels, 12 in., for 1 in. rope	Spartan	1.25

The Anti-Friction is much lighter than the Self-Lubricating Sheave Wheels.



Switchts for Runs up to 36 inches inside, we make with a 2½ inch face and over 36 inches with a 4 inch face. In ordering switches be sure and give inside measurement of run. We also make these switches complete with runs 12 feet long. Our switches are made very durable, and they have become one of the most important fixtures to an ice house.

RUN SWITCH.

Weight, 12 in, switch, 90 (bs.

The Run Switch is a labor-saving device on the outside run when filling the house. They are also used on inside runs, one ahead of the other so as to switch either way.

	Switches	are	made to	order	only.	Not	kept	in	stock.	
10.										

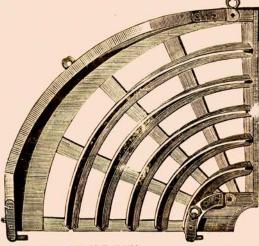
No.					Code Word	Each
445-Run Switches, for runs 36 in, or under					Spectrum	\$7.00
446-Rua Switches, for runs 44 in, or under				40	Spinx	7.50
447—Run Switches, for runs 52 in, or under					Spruce	8.50
448—Run Switches, for runs 60 in. or under	- 85				Stamen	9.50
449 Switch stop or Bumper Iron					Stanchion	1.00
450—Switch Eye Iron				*:	Statue	.75

The Circle Run is used when it is necessary to change the direction in which the ice is being moved to a right angle. This run is also used in loading ice in vessels, to turn the ice so that it will run lengthwise of the vessel.

In ordering Circle Runs give inside measurement of runs, and unless otherwise specified, eyes will be fitted on top, to suit 3x5 side pieces.

We make these circle runs of wood or entirely of steel.

Circle Runs are not kept in stock. We make them to order only.



CIRCLE RUN.

Weight, 28 in, Circle Run, 160 lbs.

No.	er erga	11, -	 	10.1	****		Code Word	Each
452-Circle Runs, wood, extra long circle	9						Student	\$18.50
453—Circle Runs, wood, regular .						123	Sturgeon	17.00
454—Circle Runs, steel, extra long circle		10	162		27		Sugar	27.50
455—Circle Runs, steel, regular	- 12					240	Sumas	25.00
456—Circle Run Clevises	40				20		Susan, per	pair .50



RUN HOOKS AND EYES.

These are for connecting rules together which have sides. We make them of steel amply heavy to stand the strain to which they are subjected.

All hooks and eyes made by us are interchangeable. The bolt holes are all the same distance apart.

WOODEN RUNS WITH SIDES.

No. Web	chtic	of 12	H., 13	to ths	i.		Code Word	Each
4561-Wooden Runs, 10 ft., 4 battens				¥			 Suwanee	810.25
4562-Wooden Runs, 12 ft., 5 battens	(4)		1.0			101	Swansea	12.50
4563—Wooden Runs, 14 It., 5 battens							Switzerland	
4564—Wooden Runs, 16 ft., 6 battens			1.000			114	Syene	16.00

Wooden Runs are made of Sprice, fitted with books and eyes, thoroughly constructed and painted.

STEEL HOUSE RUNS AND SKIDS.



T Steel Run.

Approximate weight, 10 lbs, per running ft.

No.									Code Word	Each
457-T Steel Runs, 3 slats, 6 ft.					9			12	Table	84.75
458-T Steel Runs, 3 slats, 8 ft.				23					Tableaux	5.00
459-T Steel Runs, 3 slats, 10 ft.						-			Tabor	5.50
460-T Steel Runs, 3 slats, 12 ft.									Taffy	6.25
461-T Steel Runs, 3 slats, 14 ft.		- 6						19	Tallow	7.25
462-T Steel Runs, 3 slats, 16 ft.			34	40			10		Tandem	8.25
463-T Steel Runs, 4 slats, 6 ft.									Tanner	5.25
464-T Steel Runs, 4 slats, 8 ft.	10								Tariff	5.50
465-T Steel Runs, 4 slats, 10 ft.					161				Tarlatan	6.00
466-T Steel Runs, 4 slats, 12 ft.									Tassel	7.00
467-T Steel Runs, 4 slats, 14 ft.									Tattoo	8.25
468-T Steel Runs, 4 slats, 16 ft.									Teasel	9.50



T and U Steel Run.

Approximate weight, 10 lbs, per running ft.

No.					Code Word	Each
469 - T and U Steel Runs, 3 slats, 6 ft.					 Temper	4.75
470-T and U Steel Runs, 3 slats, 8 ft.	12				Tempest	5.00
471-T and U Steel Runs, 3 slats, 10 ft.		13			Templar	5.50

J.	G.	BO	DEN	STEL	N &	CO -	ICF '	TOOLS

T and U STEEL RUNS-Continued

	1000	 	-		 			
No.							Code Word	Each
472-T and U Steel Runs, 3 slats, 12 ft							Tetragon	6.25
473—T and U Steel Runs, 3 slats, 14 ft							Theorem	7.25
474-T and U Steel Runs, 3 slats, 16 ft		5.					Thorn	8.25
475-T and U Steel Runs, 4 slats, 6 ft.							Throne	5.25
476—T and U Steel Runs, 4 slats, 8 ft.							Throttle	5.50
477-T and U Steel Runs, 4 slats, 10 ft							Thrush	6.00
478-T and U Steel Runs, 4 slats, 12 ft				1.81			Thunder	7.00
479-T and U Steel Runs, 4 slats, 14 ft						511	Thyme	8.25
480-T and U Steel Runs, 4 slats, 16 ft							Tiara	9.50
481—Shute Runs			-			-	Tiawah	10.00

House runs are made in two styles, one with all T steel slats and the other with centre slats of U steel. These runs are made in first-class manner.

The 3 slat are 18 in, and the 4 slat runs are 24 in, wide. Other widths made to order.

In connection with these runs we make an all T Steel Shute Run. This run is used in or near the shute so as to connect one or more lines of T slat runs. The T slat runs are very useful and labor saving in the house.



WAGON RUN.

No. 482—Wagon Runs, 3 slats, 6 ft. 483—Wagon Runs, 3 slats, 8 ft. 484—Wagon Runs, 3 slats, 10 ft. 485—Wagon Runs, 3 slats, 12 ft			2				181	Code Word Tibia Tiger Tinder Topaz	Each \$5,00 5,25 5,75 6,25
486—Wagon Runs, 4 slats, 6 ft. 487—Wagon Runs, 4 slats, 8 ft. 488—Wagon Runs, 4 slats, 10 ft. 489—Wagon Runs, 4 slats, 12 ft.	0 26	12	10 100	5. 25			(2)	Torch Transit Tunnel Tymbal	5.25 5.50 6.00 6.50

Our wagon runs are made entirely of T Steel slats and are somewhat heavier than the regular T runs. They are made in a substantial manner.



RUN STEEL.

No.						Code Word	Each
490-Ice Slide Steel, drilled, 10 ft						Vagabond	
491-lee Slide Steel, drilled, 12 ft					-	Valentine	.72
492-Ice Slide Steel, drilled, 14 ft.				-		Valet	.84
493-Ice Slide Steel, drilled, 16 ft			100			Valise	.96

If ends are dressed, add 5 cents per length.

The V shaped Ice Slide Steel is used where runs are not made with sides. The sharp edge grooves the ice as it passes over it, and prevents it from running off. We have this steel in 10, 12, 14 and 16 ft. lengths, drilled and countersunk, in stock.

HALF OVAL STEEL.

No										Code Word	Each
494-Half Oval Steel, 10 f	t.	1		727	2	37	2	1000	-	Valley	\$.60
495-Half Oval Steel, 12 f		\$1	4		10	21	4	20	2.0	Vanilla	.72
496—Half Oval Steel, 14 f		- 69	1	42	77	-31		2.0	-	Varnish	.84
497—Half Oval Steel, 16 f	t.		100			10	-	-		Velvet	.96

If ends are dressed, add 5 cents per length.

The Half Oval Steel is used on runs made with sides.



RUN BOLTS.

No.		Code Word	Per 100
498-Run Bolts for Oval or Ice Slide Iron, 11. in. long		Wafer	\$.50
499—Run Bolts for Oval or Ice Slide Iron, 2 in. long	4	Wagon	.5217
500—Run Bolts for Oval or Ice Slide Iron, 2 in long	19	Warrior	.55
501—Run Bolts for Oval or Ice Slide Iron, 3 in. long	+	Wasp	.60
502—Run Bolts for Oval or Ice Slide Iron, 3½ in. long		Water	.65
503—Run Bolts for Oval or Ice Slide Iron, 4 in. long		Wealth	.70
504—Run Bolts for Oval or Ice Slide Iron, 412 in. long	18	Weapon	.75

These bolts are especially suited for bolting on slide or oval iron. We carry a large stock of all lengths.



CREASEY ICE BREAKER.



Creasey Cylinder.

The Creasey Ice Breaker rapidly reduces large cakes of ice into small pieces by means of picks fastened to a cylinder as above illustration shows. These picks can be removed easily by a blow of the hammer in case it becomes necessary to replace them.

Prices from \$10.50 to \$275.00

Send for illustrated Catalogue of the Creasey Ice Breakers.



LITTLE GIANT CRUSHER.

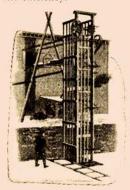
The Little Giant Ice Crusher for wagon use is a great time and labor saving device.

Prices from \$35,00 to \$225,00.

Send for complete catalogue of the Little Giant Ice Breakers.

ICE HARVESTING MACHINERY.

Rapid harvesting of ice, the large quantities that must be handled, and the peculiar difficulties of location have necessitated many different types of machinery for the purpose. The manufacture of Ice Harvesting Machinery is a specialty with the concern whose machinery we handle and the services of their engineers are offered to solve any difficulties and advise the most practical installation for any individual case. In building machinery for the handling of natural ice they have overcome many peculiar conditions and have developed the line to a high point of reliability and efficiency.



Perpendicular Elevator.

The Perpendicular Elevator is practicable for houses up to two thousand tons. This machine is inexpensive, occupies little space, requires little power, and may have its frame

work so constructed that it can be moved from door to door of the ice house or taken down for storage at the end of the harvesting season.

N	o.	1.	Perpendicular Elevator Machinery chain and frame, 20 ft. Is Same as above without frame	ift	ē	\$200.00 160.00
N	lo.	2.		ft	12	250.00
			Same as above without frame			200.00
			Each additional two foot lift with frame, extra	7.4	2.7	10.00
			Each additional two foot lift without frame, extra			7.50

Above prices subject to discount from list.

The larger storage houses, incline elevators are most efficient. They are made five sizes of three different types, including Undershot, Overshot and Side Feed. The use of each particular style is determined by local conditions and work to be done.



ELEVATOR CHAIN, POCKETS, ETC.

We carry a large stock of chain, pockets, etc., and can make prompt shipment at any time.

Price of chain, pocket, etc., sent upon application.

For further and complete information regarding ice harvesting machinery write for catalog No. 102. We will be pleased to furnish estimate and drawings on receipt of inquiries and suggest that they be accompanied with a rough sketch of the location.

Special catalogs have been prepared for elevating and lowering machines, machinery for handling artificial ice, and car icing machinery, which will be sent on request.

INDEX

Adzes	
Adzes 20 Aprons, Rubber 43 Auger, Ice 27	
Amore Inc	
Auger, Ice	
Awis, Splitting 39 Axes and Hatchets, 37, 38, 39	
Axes and Hatchets	
Bars	
Bolts, Run 21, 23, 26, 33, 31 Breakers, Power and Hand 43, 53, 54	
Breakers, Power and Hand 43, 53, 54	
Canal Chisel. 26 Cant Ice Hooks 30	
Cant Ice Hooks	
Car Icing Hooks 9a	
Until King Rars	
Chain, Elevator 55	
Chain, Elevator 55 Champion Elevator Planer 16, 17 Champion Field Planer 18	
Champion Field Planer 18	
Chip Sieigh	
Chisels 26, 33, 34	
Choppers, Hand 40	
Circle Runs	
Cleavers, Ice	
Code for Telegren phines	
Crescent Ice Saw	
Crushers, Power and Hand 59 54	
Cultivators, Field	
Depth Guages	
Elevator Foodbys Foods	
Elevator Feeding Fork	
Elevators, Perpendicular 54 Extension Swing Guide, Patent. 6	
Extension Swing Guide, Patent 6	
Feeding Fork, Elevator	
Field Planers, Champion 18 Files, Ice Tool 14 Floor or Field Leveler, Champion 19	
Files, Ice Tool	
Floor or Field Leveler, Champion 19	
Floor Leveler, Shaver Style. 19 Fore Runners for Plows 14	
Fore Runners for Plows 14	
Fork Bars 23, 24, 25	
Gins, Self-Lubricating 49	
Grapples 22	
Grooving Bars	
Guide, Patent Extension Swing 6	
Handle Guards for Plows and Markers 15	
Hand Ice Saws 36, 37	
Hand Ico Plows	
Hand Ice Tongs 44, 45, 46, 47 Hatchets and Axes 37, 38, 39 Head Pieces for Old Plows and Markers 1 Holsting Gins 49	
Hatchets and Axes 37, 38, 39	
Head Pieces for Old Plows and Markers 14	
Holsting Gins	
Hoisting Tongs	
Hoisting Tongs 31 Hook Chisel 27	
Hook Parts, Ice	
Hooks, Ice	
Hooks and Eyes Dun	
Hooks, Ice 28, 29, 30 Hooks and Eyes, Run 51 House Runs and Skids 50, 51, 52	
House Runs and Skids 50, 51, 52	
Lee Tool Grannles	
Ice Tool Files. 14 Ice Tool Grapples 28 Inserted Tooth Markers 4	
Inserted Tooth Markers	
Inserted Tooth Plows 7, 8, 9, 10, 11	
Levelers, Floor 19 Line Markers 21	
Line Markers	
Lowering Tongs	
Lynn Splitting Bar 23	

Manhous Insent-1 Touch
Markers, Inserted Tooth 4
Markers, Solid Tooth
Markers, Special
Market Tongs 32
Measuring Rod
Measuring Rod 27 Needle Bars 25 Net. Scoop 27
Net. Scoop
Packing Chisel 34
Packing Chisel
Perpendicular Elevators 54
Planers, Champion Elevator 16, 17
Planers, Champion Field 18
Plow Ropes 14
Plows, Hand
Plows, Inserted Tooth
Plows, Solid Tooth 10, 11, 13
Plows, Special 13
Pockets
Refrigerator Blocks 44
Ropes, Plow 14
Run Rolts 53
Run Bolts
Daniel Clarks
Runs, Circle
Runs and Skids
Run Steel
Run Switches 50
Saw, Crescent
Saws, Hand
Saws, Pond
Scoop Net
Scoops, Ice
Scrapers, Snow
Separating Chisels
Shavers, Ice 40, 41, 42
Sheaths. Ice Awl 40
Sheave Wheels
Shovel, Sieve
Skids and Runs
Sleighs, Chip 35
Snow Serapers
Solid Tooth Markers 5
Solid Tooth Plows
Special Ice Marker. 13 Special Ice Plows 13
Special Ice Plows
Splitting Awls
Splitting Bars. 23, 24, 25, 26 Splitting Awl Sheaths. 40
Splitting Awl Sheaths 40
Striking Under Bars 34
Steel, Run 52, 53
Street, 1000
Summer Bars
Switches, Run
Tapping Bar
Telegraph Code and Terms 3
Tongs, Drag 31 Tongs, Edging Up and Market. 32 Tongs, Hand 44, 45, 46, 47 Tongs, Hoisting, Lowering, Vaulting 31, 32
Tongs, Edging Up and Market 32
Tongs, Hand
Fongs, Hoisting, Lowering, Vaulting 31, 32
Tongs, Hoisting, Lowering, Vaulting 31, 32
Towing Hook
Vaulting Tongs
Wagon Runs and Skids 51, 52
Wheels.Sheave 49

