

**Government Instructions  
For Scotch Barrel  
Making**

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Scotch Cured  
Herring



Curling  
Western Star  
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# Government Instructions for Scotch Barrel Making

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## *Standard Barrel*

Standard Barrel contents,  $26\frac{2}{3}$  Imperial gallons ; staves, 31 inches long,  $\frac{3}{4}$  inch thick. Eight steel truss hoops. Diameter of truss hoops, 18, 19, 20,  $20\frac{7}{8}$  inches. Fill these with wood, and you have the exact size of barrel every time. Your barrel must be well fired and trussed to bring it round and close in the joints ; it must be symmetrical in proportions, and not too much quarter or too lean, or the staves will spring out. The right grade is one-in-thirty ; a stave 3 inches broad at the chimb should be  $3\frac{1}{4}$  inches half way between chimb and bilge, and  $3\frac{1}{2}$  inches on the bilge. Staves must be selected of well-seasoned wood, spruce recommended. Staves must not exceed six inches broad on the bilge. No patch work or broken staves allowed. End truss hoops must be firm on the barrel, flush with chimb, when trussed ; bilge truss hoops firm right on the bilge, then you have a firm, round barrel.

When cleaning your barrel, only take off three of your truss hoops at one time, and after pluckering one-half the barrel put your wooden quarter-hoops on the cleaned part before you take off the other three truss hoops ; this keeps your barrel always firm and keeps the staves from vibrating during the outside polish. Never leave your barrel even for one minute with only two end hoops ; this is never done in the Scotch system. Use only the square cut stave with square joint. This is the only way to get a firm barrel. You must use two side pluckers, first and second. On cleaning with finishing pluckers never allow your sweeps around the side of the barrel to straggle ; your plucker iron on the face must form a semi-circle about half an inch in the centre, bearing on the barrel, and every sweep close and even to the one preceeding it. This puts a fine skin on the barrel and gives it a finished appearance.

### *Half-Barrel*

Standard Half-barrels,  $13\frac{1}{3}$  Imperial gallons ; staves, 24 inches long  $\frac{5}{8}$  thick. Eight steel truss hoops. Fill these with wood, and

you will get the right size and roundness. Your half-barrel must be well fired, not steamed. Spruce staves are recommended. No broken staves or patch work allowed. Staves must not exceed five inches on the bilge. Find diameter of ends by six measures of your compass, allowing 1-16 of an inch over, approximately  $13\frac{3}{4}$  inches. Heads,  $\frac{3}{4}$  inch thick.

Let me say here, our fir staves are of very poor wood for Scotch halves, and are not suitable for carrying herring to European markets.

For halves, put three wooden hoops on each quarter. Drive the first hoop down seven inches from the chimb, on a chalked surface. One iron hoop, for each end, one-and-a-half inch broad, 17 wire guage.

### *Ends for Barrels*

Ends of barrels must be made up of three pieces jointed and doweled together  $\frac{7}{8}$  of an inch thick. Find diameter of ends by six measures of your compass round the croze, adding 1-16 of inch over. Heads must fit so that each may fall into the barrel with pressure of the hand when iron hoop is removed. All knots must be puttied inside the

barrel, otherwise you can never make it tight ; and if it is not tight, it's nothing. Have your ends cut equal on both sides and the edge made to fill your croze. Good fir wood is suitable for ends. The breadth of any one piece should not exceed eight inches. To prevent warping by the sun, the best should be selected for heads and the inferior for bottoms. All should be clean and carefully cut. If your head is too firm, take a little more off with your chimb and croze. All ends should be of one size, and fit like a glove.

### *Hooping Barrels*

Put three wooden hoops on each quarter, if strong and good. Drive your first hoop down nine inches from the chimb, all three bearing firmly on the barrel. If hoops are small, put four hoops on each quarter. Drive your first hoop nine-and-a-half inches from the chimb, all driven tight on a well chalked surface. Use plenty of chalk. Before you put the head of the barrel in, put in about a gill of made clear pickle, bore a quarter-inch hole for spile, then blow wind into your barrel, turn around and around

to see if it is wind and water tight. Every barrel must be tested this way before it leaves the cooper's hands. This is one of the things that counts in the Scotch barrel system. Iron hoop for each end must be two inches broad, to go down past the croze to protect the chimb, 1-16 guage thick.

### *The Small Things that Count*

The spile hole must be made in every barrel head, to test the barrel with wind and pickle when barrel is finished ; also, it must be tested with wind when headed up with herring. You are then sure your barrel is tight every time. No chances are taken. The value of this can be proven : Let your barrel lose its first pickle when packed, it will shrink the herring one-quarter ; you have to make that good with additional herring ; besides your herring have lost in flavour. If turn up in the market without pickle, it may cost you two to three dollars per barrel, and gained a bad name ; so careful methods are right and always pay, and is a good trade rule for everyone to observe.

## *Gibbing and Packing*

Gibbers work in pairs, and have five culling tubs or baskets between them, each tub for a separate cull. When culling tubs are full, herring are then carried to the respective rousing or dredging tubs, to be mixed with salt. The packer does the dredging and uses the regulation amount of salt, and has his barrel given him by the cooper who superintends the packing. He marks on the bottom of each barrel class of cull, date and packer's number, thus :—

Nov. 5th, Large Fulls

No. 7 Packer

The packer knows he is responsible for his work, and does his best. Care must be taken to keep your culls and dates all by themselves, then you know what time they are ready for filling up. Ten free days in Seasticks for Matties, twelve free days for Large Fulls, Medium Fulls, and Mattie Fulls, etc.

Heads should be put in the barrels forty-eight hours after packing, and barrels laid on their sides.



### *Cooper's Duties*

One cooper must look after six gibbers to see that gibbers take the gills and viscera from the herring in a proper manner. With one sweep of the knife enter at the side of the head at the base of the gills, making a clean cut right under the breast or pectoral fins. The cooper has his measure stick with all the different lengths of culls marked thereon, to keep cullers right in selections. He is responsible for this work.

One cooper must look after six packers, mark the class and date on every barrel, and number of packer. He must satisfy himself that every barrel he hands over to packers is perfectly tight and clean; that the packing is firm and neat, and herring right on their backs with side and centre herring in their order, with just the exact amount of salt for each row, according to cull, as laid down in circular.

Salting depends on variety of conditions. Temperature, markets, class of herring, etc., all have to be considered and reckoned with. This is reduced to a fine art by those who pack for the different

markets, so that the cooper who has to look after the packing and salting has to understand his business. For fall pack in Newfoundland this will approximately meet the requirements :

56 pounds of salt to one upset Extra Large Fulls.

50 pounds of salt to one upset Large Fulls.

46 pounds of salt to one upset Med. Fulls.

43 pounds of salt to one upset Mattie Fulls.

40 pounds of salt to one upset Matties.

In cold weather Seasticks should be kept in a temperature from 50 to 60 degrees for the term of six days at least. The fundamental principle is to give the herring as little salt as possible, and yet keep them wholesome. The less salt the more palatable, as the demand of the trade is for soft cure ; so if we desire the shekels we must supply their wants.

### ***Filling up for the Crown Brand***

Bore your bung-hole eleven inches from the bottom chimb ; take the

head out of your barrel ; run off your pickle into carrying tubs ; save all your pickle and put it in empty barrels ; repack the first two rows of herring, and put a slight dust of salt on both rows. Have your puncheon tub clean, and empty a barrel of herring into it ; make clear hard pickle, and put several buckets of it on the top of your herring in the tub to brighten them up. Strain them through the pickle into carrying tubs, then take them to your barrels and fill up. Place your barrel head behind you, and all the finest bright herring you come across put on the barrel head for the top row. Pack this row as firm and neat as possible, pressing the heads of the row down on both sides, the centre of the row being level with the top of the chimb. Get six female fish for head herring. Press those with your thumb on the bellies, and put them neatly on, three on each side for head herring ; no salt. Wash your barrel head with clear pickle on the inside (not water.) When head is pressed into the croze, your herring look as beautiful as a sheet of white paper, and contains 250

pounds of wholesome fish. Strain your pickle through cotton cloth to take all sediment and impurities out, and make it more transparent. This helps to keep pickle sweet for a longer period ; and if pickle is right, so are the herring. Put your barrels on their sides, head to head, that class and date may be seen marked on the bottom, and every class of herring laid out by itself. Take your pickle fillers and put your pickle back through the bung-hole, then you have things complete for inspection. This is the Scotch system, and for doing it they get the dollars.

### *Request Note for Inspection*

The cooper who looks after the pack has to make out a note to Inspector, stating the number of barrels or half-barrels he is to present for inspection ; also, dates and class, and make a declaration that the herring have been cured under the Fishery Laws, and no stale, drowned or over-day fish used. A false declaration will cost him \$50 or imprisonment ; and it is only the cooper that is recognized by law in this matter. This is in line with the Pure Food Laws.

### *Inspection of Pack*

One barrel in ten is raised, head and bottom, turn about. Baskets are brought, bottoms taken out, and the Inspector goes half down the barrel to see herring are right, salted, classified, and meet the requirements of the Crown Brand. If so, the branding may go on in sight of the officer.

Inspection and organization have made the Scotch herring trade what it is to-day,—the best in the world. But there is no reason why we in Newfoundland cannot equal and even improve on Scotch Pack, if we are determined enough to give the different people just what they want. There is no royal road by which to accomplish it, but just by strenuous effort ; and if we do this we shall find our reward.

### *Examination for Inspectorship*

You must have learned barrel making and herring curing for five years as apprentice, pass a civil service examination, describe a herring scientifically, tell the number of vertebra and framework of a herring, and give verbal explanations of all different cures and the

suitable markets. This keeps things right for the trade. They cannot afford to lose it.

Under present conditions we have a name in the States for leaky barrels and rotten herring. But what else could we expect? Every one being a law unto himself, and without knowledge of the first principles of wholesome cure; we could not look for much under any such conditions. The same prevailed in other countries until their governments took the matter up and organized the whole trade by practical methods. This solved the problem, and it could not be done in any other way. For us at present to face the competition of the Dutch and Scotch, would be like putting an armed mob up against a disciplined army. But give us the discipline and we fear no foe, let our competitors be whom they may.

Now, the aim of the Government, as expressed by the Marine and Fisheries Department, is to help the Newfoundland curer to place his product on the market in a better condition than he has been able to do in the past, to aid him in

the finding of new markets, and to look after his interests in these markets,—in a word, to get him more money for his stock. This is as it should be, and a very laudable desire it is. They are encouraged in this action by the demands of some of the largest fish firms in New York, who have complained time and again about our poor barrels and poor pack. It is the handler who represents the consumer, the man we have to please,—one who has the best right to speak. Let us then, in reason, give heed to what he says. Give us your very best and we will give you the dollars, is the consumers reply. Will we respond ?

### *Regulations for Scotch Pack*

No person can be recognized as an authorized manager, except under authority obtained from the Marine and Fisheries Department, upon application made by the curer, when the Department shall satisfy itself that the party is a fit and proper person to undertake the duties of the same. This shall be for the benefit of the curer and for the trade itself ; for all suffer if the standard of cure is lowered. This

man is held responsible by the Fisheries Department ; and if he fails in his duties, his certificate will be canceled and he must lose his job. This is also against the interests of his employer, for it is a well-known fact that all Crown Brands realize the highest figures in the markets, and are the first to be purchased ; while those without the Crown Brand have to await a lower price at a later date, with shortage to be paid for.

***What Advantage to Newfoundland if we adopt Scotch Pack ?***

1. It is the class of pack most in demand.
2. It is the class of pack that brings the most money.
3. It gives us entry to all the European markets, as well as the United States.
4. Price will give an impetus to catch and produce more labour.
5. It will transfer bulked herring to barreled.
6. It will double the value of catch to Newfoundland.
7. It will create a new industry.



8. We are no longer confined to one market.

9. We gather knowledge, and knowledge is power.

10. Branding and inspection will help us to sell F.O.B. in the markets by wire, when markets are well supplied and no buyers on the ground.

11. Without Crown Brand as a guarantee of wholesome cure, we must consign and take all the risks and expenses ; and we know what that means by the past : three to four months waiting for returns.

12. We must adopt Scotch pack, and do it right, or be blocked out of every market when the war is over.

Now, let no man imagine for a moment that the foregoing Fishery Rules are for the benefit of any particular party, but is an expression of a whole-hearted desire to raise the herring trade of Newfoundland to a higher level than it has ever had in the past. The Rules have proved their usefulness and effectiveness by others, and will do equally so for us if we approach

the business in a right and determined spirit. All who don't will stand to lose, that is certain.

It is for your benefit, my herring curing friends. It will pay you to have an excellent pack, and economy in operations. None can deny that fact. Then it's up to you to set your house in order. Fall into line, and march abreast with the very best in the world ; then we shall come into our own.

I am, at your service,

W. McBEAN.





