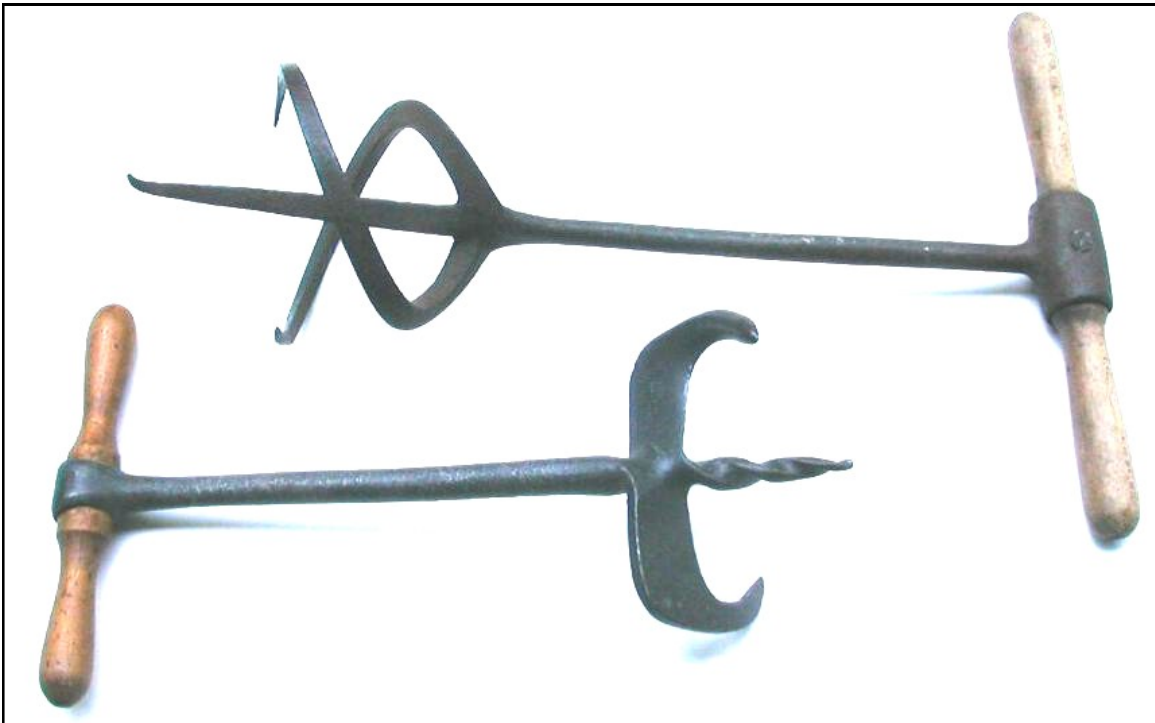


# Fruit Lifters

(a.k.a. Sugar Devils)



# Fruit Lifters

by Bob Roger

Dried apples, dates, figs, apricots, currants, peaches and many other varieties of fruits, sugar, and meats including pork and fish (in brine or dried) were packed into wooden barrels, and the contents were tightly compacted when the barrel head was pressed into position with a large screw-driven one-sided vise. Then the barrels were shipped via sea, rail, and wagon to the local mercantile where the heads were removed and the contents offered for sale. The shipping of dried fruits in barrels had ended by 1900, although sugar continued to come in barrels for a short time after that<sup>1</sup>.

Fruit lifters were used to get the tightly-packed contents out of the barrel. What the grocer did was pick up his trusty fruit auger, turn it into the center of the 'mass' a little way, and pull it out – bringing a small core of the contents with it. With the small core removed, the contents at the sides of the hole could be loosened by pushing them into the space vacated by the core. Some designs just loosened the contents without pulling a core out.

These food-handling implements were prominent in mercantiles and general stores throughout the Victorian era, but they became obsolete around 1900. Strangely, they are also missing from many museums and collections.

## *The Patents*

There were at least 15 U.S. patents for these tools spanning about 25 years, and most of the patentees were from the mid-West. Some of the names used in the patents were:

PRESSED FRUIT LIFTER  
DRIED FRUIT LOOSENER  
SUGAR DEVIL  
FRUIT AUGER  
GROCERS FORK  
SUGAR & SALT CRUSHER  
SUGAR LOOSENER  
SUGAR CUTTER  
LOOSENING FORK  
FRUIT TONGS

1. The first patent was number 112,959 issued on March 21, 1871 to Ennis A. Raymond of Waterloo, Iowa. His lifter was a helix with gradually increasing spiral diameter from point to top.

2. The next patent was number 137,622 issued on April 8, 1873 to Cornelius Ragan of Waterloo, Iowa. He used a pointed 3/8-inch square bar to form his helix with his spiral diameter changing from 3 1/2 inches at the tip to 3 inches at the shank. His overall length was 18-20 inches.

3. Patent number 144,147 was issued on October 28, 1873 to John F. Schmeltzer and Joseph M. Roberts of Winona, Minnesota for a double-helix lifter. They also had their spiral diameter gradually change, being greatest at the tip.

The drawings for patents 1-3 are shown in Figure 1.

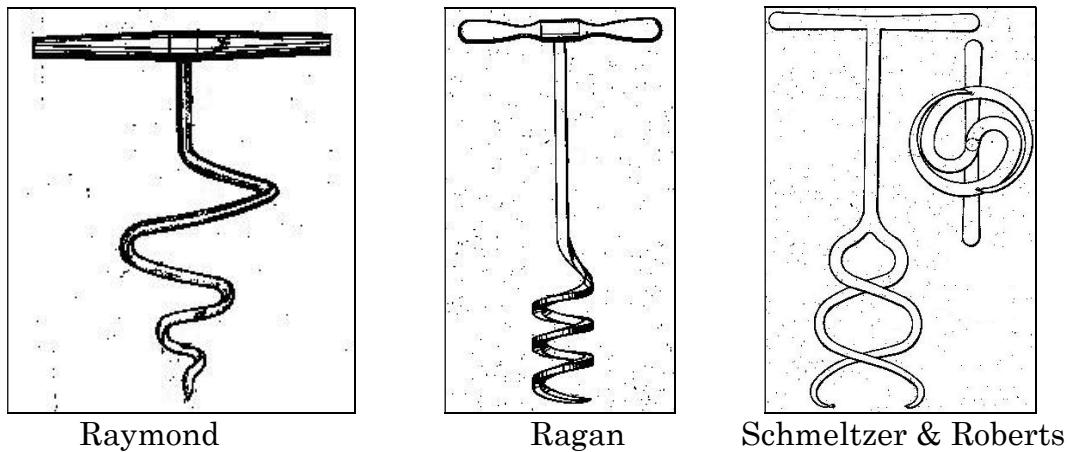


Figure 1. The first three patents

4. Patent number 144,542 was issued on November 11, 1873 to Harry W. Holman of Waterloo, Iowa for a lifter without a helix. He had a spear with pivoted wings at the tip. When pushed into the barrel the wings folded into the body of the spear, but when it was pulled up the wings pivoted out, grabbing and loosening the contents.

5. Patent number 166,171 was issued on July 27, 1875 to Henry J. White of Green Bay, Wisconsin. He had a central guide-rod and one or more spiral prongs, and a handle of either wood or metal. His drawing illustrated a twisted guide-rod but the patent description was silent on that matter. White assigned his patent to James V. Hiddleson of Chicago, Illinois. An advertisement in 'The American Grocer', November 10, 1881 illustrated White's lifter with the correct patent date and labeled as HIDDLESON'S DRIED FRUIT AUGER. Its guide-rod was straight, and S. W. Sheldon of 93 Reade Street, NY was listed as the sole agent for it. So apparently White sold the patent to Hiddleson who manufactured the tool and contracted Sheldon to market it. The advertisement is shown in Figure 3.

6. Next in order was patent number 172,278 issued on January 18, 1876 to Henry F. Patton of Appleton, Wisconsin. He assigned one-half to Albert S. Dean of Eau Claire, Wisconsin. His design consisted of a pointed guide-rod that supported a bracket. Pivoted to the bracket was a two-pronged curved claw. The claw was placed in alignment with the guide-rod and the ensemble was pushed into the fruit near the edge of the barrel. The claw handle was then raised, swinging the claw through the fruit and loosening it.

Patents 4-6 are shown in Figure 2.

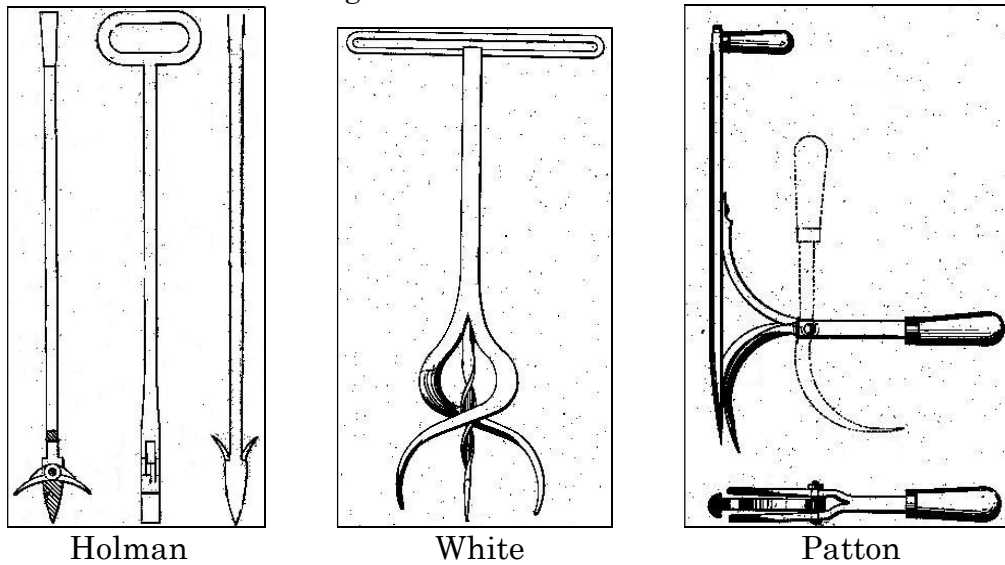


Figure 2. Patents 4-6

HIDDLESON'S  
**Dried Fruit Auger.**

PATENTED, JULY 27th, 1875.

AN INDISPENSABLE AUXILIARY TO EVERY  
Well-Appointed Grocery Store.

This is an article which every Grocer has long felt the need of. With very little effort the contents of a barrel of Dried Fruit can be so loosened that it can be readily transferred to the scales for retailing. It is one of those simple LABOR-SAVING IMPLEMENTS! which commends itself to every one, and which requires no special effort to introduce. Its virtues are apparent on the most cursory examination.

**A LONG SOUGHT FOR NECESSITY.**  
For hardened sugars it will be found very serviceable, and for many other purposes will supply a want, to meet which nothing has yet been presented to the trade.

For sale by the wholesale trade generally. In ordering be sure and state *three-prong*, as it is the only auger that is practical and gives satisfaction.

SOLE AGENT:  
**S. W. SHELDON.**  
—SUCCESSOR—  
**S. W. SHELDON & DUNSCOMB,**  
93 Reade Street. N. Y.

ENTERPRISE  
**Dried Fruit and Sugar Auger**  
PATENTED

Price, per dozen \$6.00

Packed 1 dozen in a case

**THIS** simple implement has been designed to loosen quickly all kinds of Dried Fruit and Hard Sugars. Being made of malleable iron, it is strong, durable and well finished. For convenience, utility and rapid working it is unexcelled.

Figure 3. Hiddleson (1881) & Enterprise (1899) Ads

7. Patent number 177,863 was issued on May 23, 1876 to William McCormick of Blair, Nebraska. His concern was that existing lifters become clogged, and the design of his 'flattened' double helix provided a more open 'core' between the arms and fewer turns than did Schmeltzer & Roberts.

8. Patent number 221,842 was issued on November 18, 1879 to Joseph McMullin of Casey P.O., Iowa. His straight-handled tongs had tips in the form of flattened barbs with knife edges. His handles are long enough to obtain the required power and may be straight, formed with loops, or covered with a wooden sleeve. If looped, they would be very similar to ice tongs.

9. Patent number 234,855 was issued on November 30, 1880 to Arthur Daniels of Southbridge, MA. He added a curved arm between the tines of an ordinary grocers fork to serve as a fulcrum for loosening the fruit, and also as a third arm to further loosen the contents. He mentioned that up until then the ordinary grocers fork was used for such tasks.

Patents 7 - 9 are shown in Figure 5.

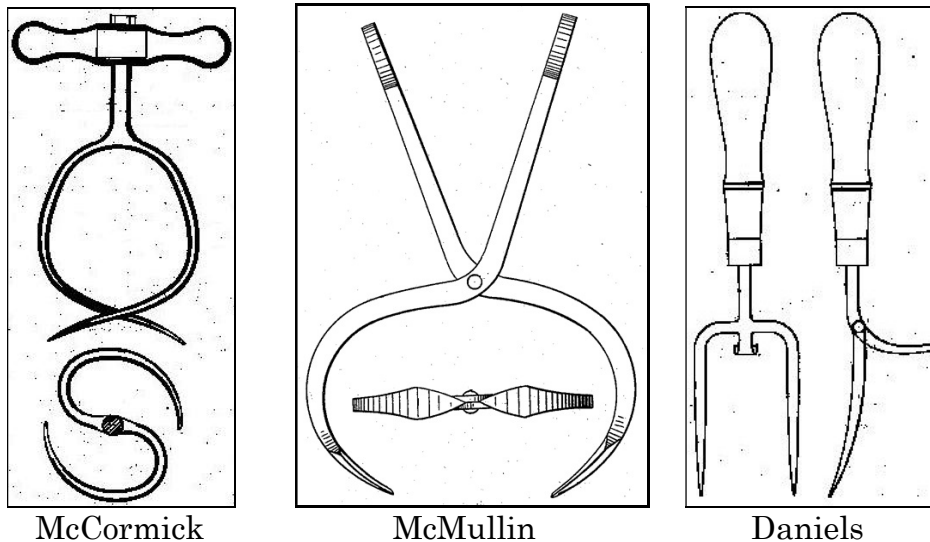


Figure 5. Patents 7 - 9

10. Patent number 252,738 was issued on January 24, 1882 to Ernest P. Chesbro of Willimantic, CT for his device for breaking up sugar, salt, etc. It was pressed into the food while twisting, breaking it up so that it could be removed. His device had four arms of teeth and the teeth pointed straight down.

11. Patent number 298,099 was issued on May 6, 1884 to John Lash of Philadelphia, PA. He had a design similar to Chesbro but used only one arm and had his teeth angled forward and back. His patent was manufactured as

the ENTERPRISE auger and was advertised in the 1899 catalog of The Enterprise Manufacturing Company of Philadelphia, PA. That advertisement is illustrated in Figure 3, and the auger in the illustration is marked 'ENTERPRISE M'F'G CO PHILA'.

12. Patent number 332,179 was issued on December 8, 1885 to Silas Aughe of Dayton, OH. He provided adjustments so that the blades could be lengthened or shortened, and also slid up and down the shaft.

Patents 10 –12 are shown in Figure 6.

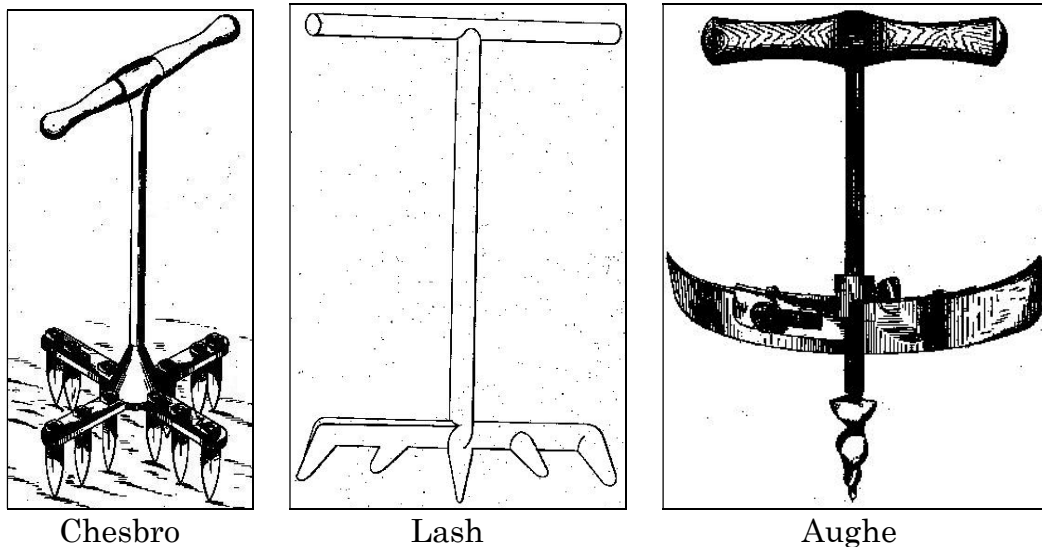


Figure 6. Patents 10 - 12

13. Patent number 352,736 was issued on November 16, 1886 to John E. Coles of New York City. Coles referred to a previous patent of similar design but didn't name it. Probably he was referring to White's patent (number 5 above). However, Coles' design was slightly different, having a larger diameter of twist for two or more turns in the center guide-rod and forming blades at the tips of the two coiled arms. He also placed the tip of one arm lower than the other so that it engaged the fruit first. Each arm then 'shaved' layers off the fruit or sugar, much like a double-bladed twist auger cuts a hole in wood.

14. Patent number 365,247 was issued on June 21, 1887 to William P. Elliott of Shelbyville, IN. His guide-rod had a screw-point and twisted shaft, like a carpenter's wood bit, with sharp longitudinal edges behind the screw-point. He then fastened a wing to the shaft. The wing was shaped horizontally like a shallow 'S', and in the vertical plane the top edge of the wing was approximately semicircular.

15. Design patent number D 31,896 was issued on November 28, 1899 to Francis Marion Swartz of Newark, OH. His design had a circular head and four downward-projecting tapered teeth arranged around a center guide-rod.

Patents 13 - 15 are shown in Figure 7.

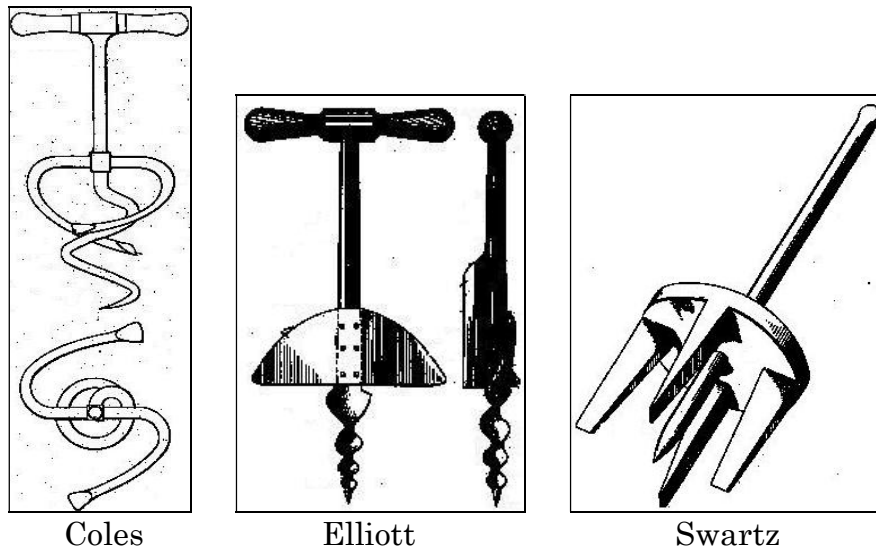


Figure 7. Patents 13 - 15

Note: Variations of fruit lifters were invented at slightly later dates for removing butter, lard, and the like from barrels and tubs. These are more appropriately called butter removers or cutters and are only referenced here to provide a link to researching devices similar in function to fruit lifters. For example, patent 677,732 was issued July 2, 1901 to remove butter and lard from barrels, and 833,572 on October 16, 1906 for removing butter from large tubs. Patents 724,050 (March 31, 1903), 793235 (June 27, 1905), and 798,453 (August 29, 1905) were for a similar purpose without specifying the type of container. I have an example of 724,050.

### *Surviving Examples*

If these tools were ‘necessary equipment’ in every general store during the Victorian era, where are they today? I have been looking for them for over 25 years, and lifters other than White/Hiddleson, McCormick, and Coles are very hard to find. But here are some that have survived.

Figure 8 shows two forged examples of patent variants. The small, unmarked double-helix on the left is a variant of Schmelzter & Roberts 1873 patent that was probably made earlier. It is sized for apricots, currants, and dates. It is 8 inches long overall and the diameter of the prongs’ sweep at the tip is 1½ inches. That diameter reduces toward the handle, as the patent requires.

The unmarked single-helix lifter on the right is made of 3/8 inch round stock and has a coil diameter of 3 inches at the tip, reducing in size toward the handle. Its overall length is 15½ inches. This appears to be a variant of Ragan’s 1873 patent, although Ragan used a 3/8-inch rod of square cross-section.

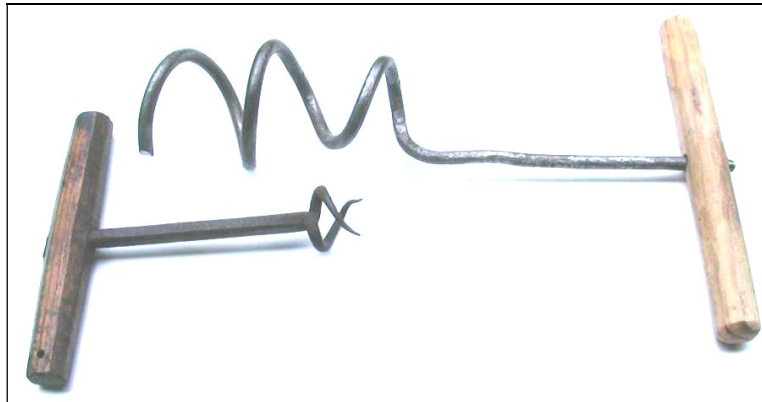


Figure 8. Variants of the Ragan & Schmelzter patents

Figure 9 shows an example of White’s 1875 patent and one that somewhat resembles Elliott’s patent, but isn’t. The example at the lower left with the twisted guide-rod is a pre-patent example of something, but I have not found a patent for it. Although in appearance it resembles Elliott’s, there are differences and each arm is marked ‘PAT AP’D FOR’. Being made during the patent approval process, it is possible that it represents a manufacturing improvement over the patent description and is Elliott’s, but that is not certain. The overall length is 12½ inches and it is 4¾ inches between the tips of the arms. I have seen at least two more like this example.

The example at the upper right is marked ‘PAT<sup>D</sup> JULY 27 75’ and is the version of White’s patent that was manufactured by Hiddleson and marketed by Sheldon. The tip of the guide-rod on this example was bent by accident (it



should be straight to the point). The overall length is 16¼ inches and it is 4½ inches between the tips of the arms. This version is the most common of all surviving lifters.

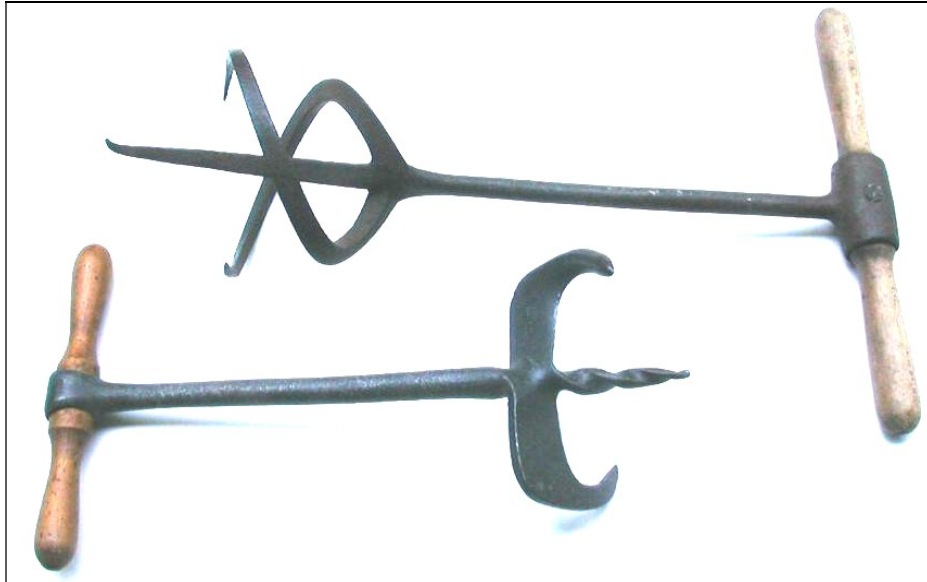


Figure 9. A pre-patent example (lower left) & White/Hiddleson example

Figure 10 shows two views of an example of McCormick's 1876 patent marked 'PATD MAY 23 1876'. The overall length is 14¾ inches and the arms are 6 inches apart.



Figure 10. Two views of McCormick's lifter

Figure 11 shows the business end of a Cole's lifter marked 'PAT NOV 16 86'. It is  $14\frac{3}{4}$  inches long and 8 inches between the tips of the arms. One arm extends  $\frac{1}{4}$  inch longer than the other, as stated in the patent. This seems to be the second most common lifter, although not nearly as common as the White/Hiddleson lifter. Figure 12 shows this example along with a rare unmarked variant that is identical except that the guide-rod is straight rather than a helix as called for in the patent.



Figure 11. Marked example of Coles' lifter

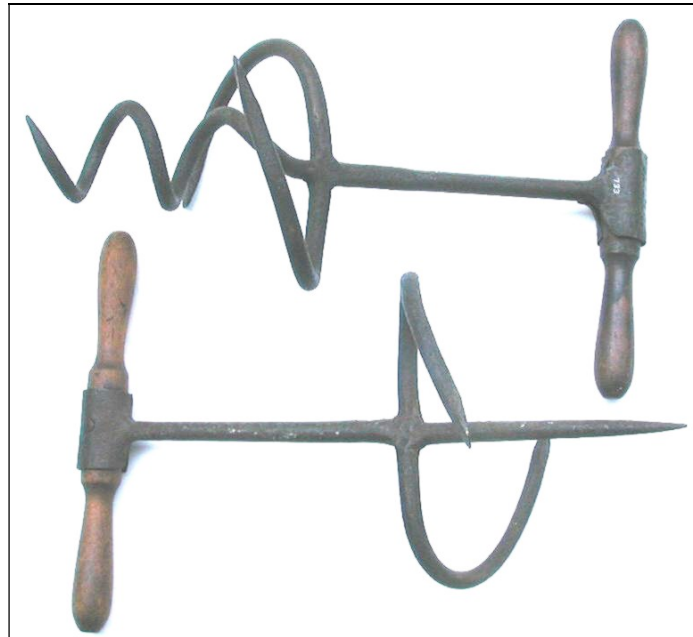


Figure 12. Coles' lifter (top) and an unmarked variant

Figure 13 shows a very early example that is somewhat similar to the unmarked Coles' variant in Figure 12.

Figure 14 is a marked example of the Enterprise lifter (Lash's patent). The patent date is marked on the shaft. The handle is 12 inches long and the entire length of the tool is 12 inches.



Figure 13. Early and unmarked



Figure 14. The Enterprise

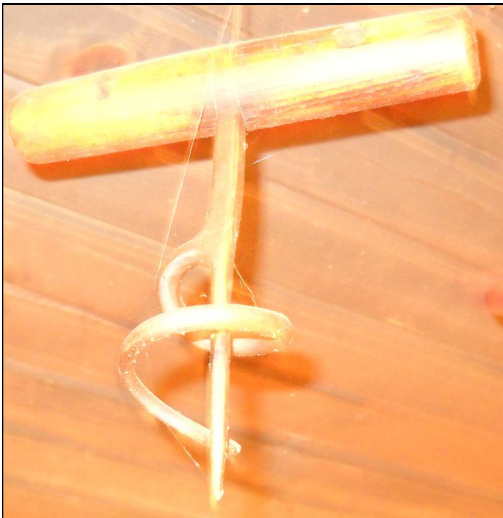


Figure 15. Single arm, unmarked



Figure 16. Schmelzter

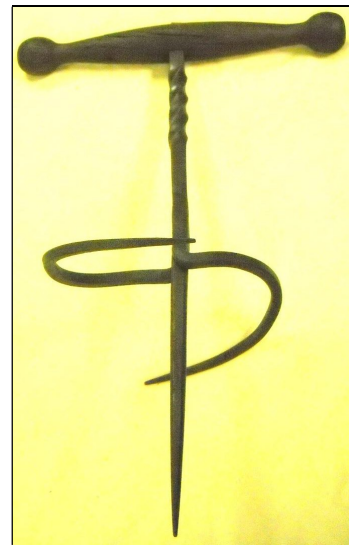


Figure 17. Decorative

Figure 15 shows an unmarked lifter that has only one side arm.

Figure 16 shows an unmarked example that appears identical to Schmelzter & Roberts' 1873 patent.

Figure 17 shows a very old, elegant, decorative, yet unmarked lifter.

Figure 18 shows a variant of the Enterprise (Lash's patent, Figure 14) that is larger (21 inches long, 14-inch handle, 7-inch blade) with a flat spiral lead screw instead of a cone point. It is unmarked.

Figure 19 shows an example of Daniels' 1880 patent.

Figure 20 shows an example of Holman's 1873 patent. This example appeared in *The Gristmill*, June 2011, page 34 as a What's It.



Figure 18. Variant of Lash's patent



Figure 19. Example of Daniels' patent

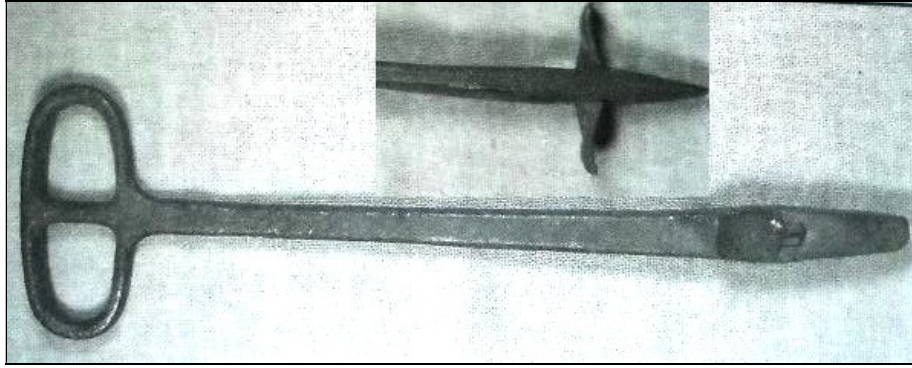


Figure 20. Example of Holman's patent



Figure 21. Possible Holman variation

Figure 21 shows a hand-made example similar to Holman's patent that is missing a handle. The end of the shaft is 'finished' rather than broken off, so it was either intended to not have a handle or a handle was never added. It is the appropriate size for a fruit lifter, but would also function well as a small hay remover.

Notes:

1. "Fruit Lifters", Laurence A. Johnson, The Chronicle of the Early American Industries Association, March 1957 (note: this article covers only five patents and two examples).