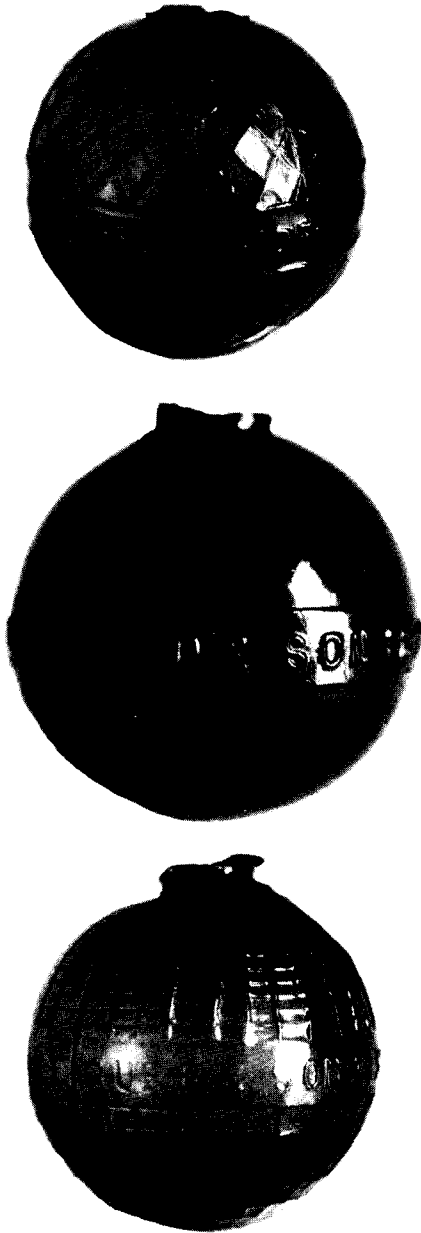


GLASS TARGET BALLS OF CANADIAN MANUFACTURE

by Donald M. Blyth



Amber glass target ball manufactured by the Rutherford Glass Co., proprietor of the Hamilton Glass Works at Hamilton, Ontario. Its quilted pattern was intended to prevent the shot from glancing off the smooth glass. A blue variation is known. There is alleged to be a similar ball marked *HAMILTON GLASS WORKS* but it has not been seen by the writer.

A plain and a quilted amber colored glass target ball marketed by John Gurd and Son, the gunmaking establishment located at London, Ontario. They were probably made by the Rutherford Glass Co. — the Hamilton Glass Works and are marked *J. GURD & SON, 185 DUNDAS STREET, LONDON, ONT.*

Donald Blyth has collected material related to the gun sports for more than 40 years. His current interest is Ontario-made decoys.

Although the earliest records of trapshooting have been lost in antiquity, Delabere P. Blaine writing in *Encyclopedia of Rural Sports*, London, 1858, notes that the February 1793 issue of the *Old Sporting Magazine* recorded it being in general practice at that time. The earliest record of trapshooting in America states that Cincinnati, Ohio was the location and the date was 1831 but considering its popularity in England this would seem to be a very late date. The shoots were popular and often large sums of money would be wagered on their outcome.

In these early trapshooting competitions the targets were live birds; usually Wood Pigeons in England and Passenger Pigeons in America, although other birds were used if available in sufficient supply.

The birds were placed in boxes or traps set into or on the ground and they were released by pulling a string which was attached to a sliding top or a spring operated door.

The increasing scarcity of live birds, their erratic flight, and the difficulty of shipping them in great quantities to a match site, created the desire for some type of artificial bird. The objections of conservationists and humane societies in the 1860s and 1870s led some states to ban live bird shooting matches and in England there was movement to eliminate all live-bird trap shooting. In 1893, the Inanimate Bird Shooting Association was established with J. D. Dougall, the prominent London gunsmith as its first president.

In 1866, glass target balls and a machine to launch them were introduced into America by Charles Portlock of Boston, who brought them from England where they had been in limited use since the 1830s: the machine propelled the balls only a short distance, they were quite easy to break, and the sport had little following. In 1877, A. H. Bogardus, a champion wing shot perfected a machine for launching glass balls a much greater distance. This machine, largely through his efforts and showmanship, made glass ball shooting very popular for a few short years. Two other champion wingshots and exhibition shooters, "Doc" W. F. Carver, at one time a partner of "Buffalo Bill" Cody, and Ira Paine played a competitive role which helped to further the sport.

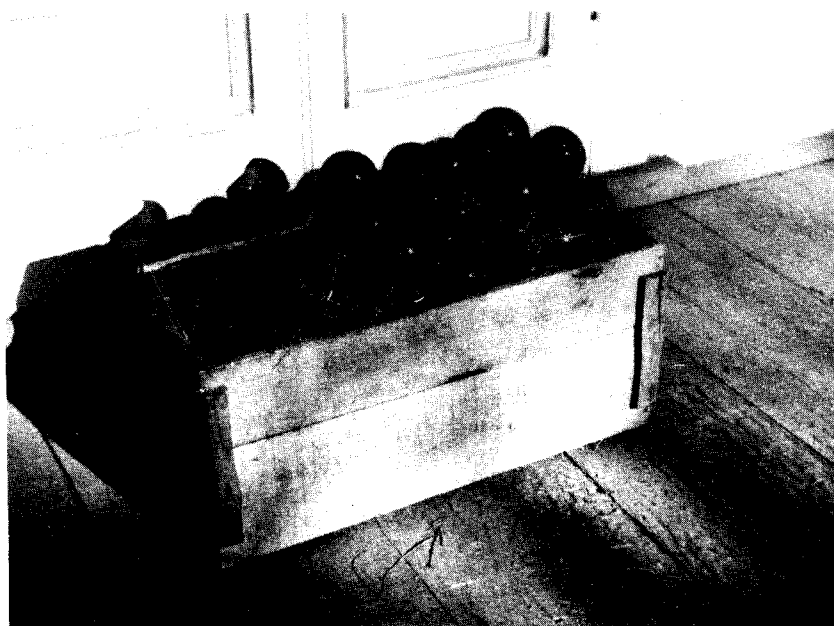
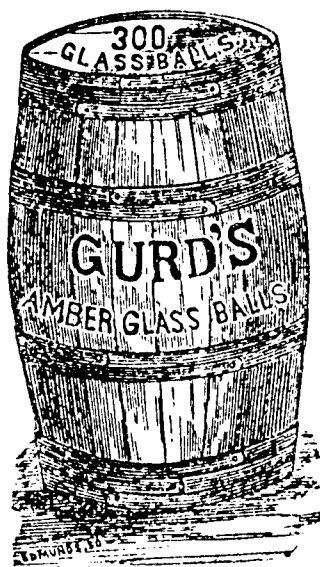


Illustration and text from the *J. Gurd & Son's Illustrated Catalog* of the 1880s which illustrates how target balls were sold. The unmarked case on the right contained 63 quilted balls with the J. Gurd & Son, London marking.

ILLUSTRATED LIST, PAGE 29.
GLASS BALLS AND GLASS BALL TRAPS.

Gurd's Plain Amber Glass Balls, per Barrel,	\$4.25
" " " " " per 100,	1.50
" Feather Filled Glass Balls, per Barrel,	6.00
" " " " " per 100,	2.25
Card Revolving Trap,	10.00
Bogardus' New Model,	6.00
Bogardus' Old Model,	4.00

The first glass balls were made of clear glass but they were difficult to see in some light and were soon replaced by colored glass. Amber seems to have been a favorite color but blue, green, and other colors were used.

The standard size ball was 2.75 inches in diameter and weighed about two ounces although smaller and larger sizes could possibly have seen local use in some areas. The early balls had a smooth surface but later English patterns were "quilted" with a raised pattern to reduce the chance of the shot from glancing off. Raised dots, or rolling the hot glass in sand were other techniques used to achieve the same result. The glass at the mouth of most balls is quite rough where the stem was broken from the ball but some balls have been noted with this neatly ground smooth.

Many manufacturers and sporting goods dealers had, for advertising purposes, their names cast onto the balls. These custom-made balls are in special demand by collectors.

Some balls were filled with sawdust, shavings, feathers, or pieces of colored cloth to make a "kill" more spectacular.

The period when glass target balls were most popular, the 1860s to 1880s, the cost of the standard ball .

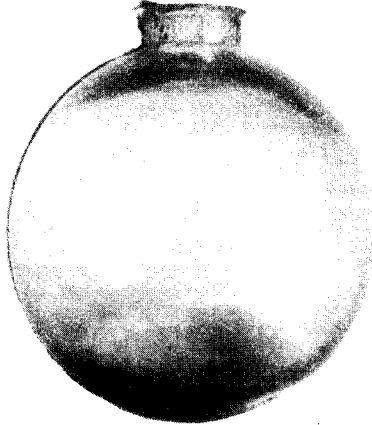
Canada was less than one cent per ball. They were sold in barrels of 300 or crates of 100, protected by sawdust or straw packing. Photographs of an unmarked crate of *J. Gurd* marked balls which contained 63 balls are in the collection of the London Centennial Museum at London, Ontario.

Glass ball shooting seems to have been common only in Great Britain, The United States, and Canada. Although large quantities of targets would have been imported into Canada there was a domestic product made by The Rutherford Glass Co., proprietors of the Hamilton Glass Works at Hamilton, Ontario, and other glass manufacturers were probably active although documentation of this has not been located.

One Canadian patent has been located which was issued to C.A. Tatum of New York, N.Y. It is dated 30 August 1878 and covered rolling the ball while still in a molten state, in sand to produce a rough surface to prevent the shot from glancing off the otherwise smooth, glass, surface. The patent also mentions dipping a finished ball in pitch or other adhesive substance, and then rolling it in sand to produce the same results.

The only known survivor of this patent bears the patent date impressed in the glass around the rim but it

A Vaseline colored ball marked around the neck "PAT. 8TH MO -2-2-? 1878." This is the date of the Canadian patent issued to C.A. Tatum of New York but neither of the two features covered in the patent have been embodied into the specimen. The ball is completely smooth and has been cast in a two-piece mold.



CANADIAN PATENT No. 9,160 DATED AUGUST 30 1878
Issued to C. A. Tatum per H. Gerner

"Specification"

To all whom it may concern.

Be it known that I, Charles Albert Tatum of the City of New York, County and State of New York, United States of America, gentleman, have invented new and useful improvements in

Spherical Glass Targets and I hereby declare that the following is an exact and true description of my invention which will enable others to make and use the same, reference being had to the accompanying drawings a part of this specification.

The invention is to provide for improved glass balls, intended to be thrown from a trap for the purpose of practice shooting with shotguns, rifles or pistols.

The balls heretofore made for this purpose have surfaces partly flattened, serrated or corrugated in order to prevent the shot from glancing off from the balls.

The flattening, serrating or corrugating of the surfaces of glass target balls is however objectionable as these places or spots become stronger and present more resistance to the shots than the other parts or places of the balls.

The principal defect of glass target balls is furthermore by this construction of the balls not obviated but rather increased.

It is evident that a glass target ball thrown up in the air presents a shining surface to the gunners eye, which especially when the sun shines, prevents him to take accurate aim.

This glaring affect is rather increased when the smooth glass surface is corrugated, serrated or flattened, as the surface is increased and made to present different angles for the light to take effect upon and again deflect the rays from.

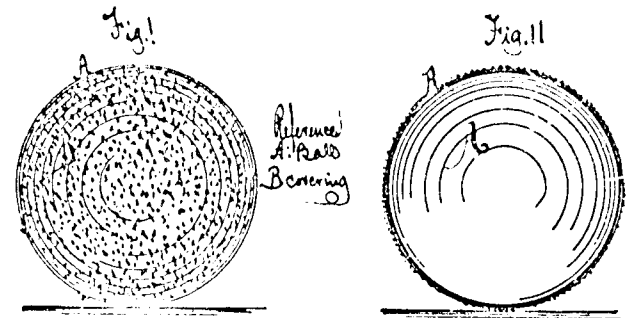
In order to obviate these difficulties I roughen the surfaces of glass target balls by causing the exterior of the ball to be coated with any suitable mineral or metallic substance, coarse or fine granulated or pulverised as may be desired.

The roughening of the surfaces of such glass target balls, may be most advantageously done, as hereafter describe, although I do not confine myself thereto, as long as the desired result is obtained, consisting in roughening the surfaces of such glass target balls, by causing sand or any metallic or mineral substance to adhere to.

This may be effected, either by dipping the balls in a bath of a suitable glutinous or adhesive substance, asphaltic or otherwise and after this expose them to be dusted or covered with suitable metallic or mineral substances, granulated or pulverized, coarse or fine, as may be desired.

9160

Improvements in "Glass Target Ball"



Verified to be the Drawings referred to
in the Specification hereto annexed -
J. B. Morris
Notary Public
New York City, New York, August 10, 1878.
Charles Albert Tatum
Per: Henry Gerner
Atty

When the glutinous substance is dried by exposure to the air or to artificial heat, it will be found that the whole surface of the ball is covered with a rough coating on which the shots take much better effect than on the smooth glass and prevents entirely the glancing effect of the glass.

Or the roughening the surface of the ball may be affected by covering the glass, before being moulded, with sand or other suitable mineral or metallic substances, either by dusting it on or by rolling the molten glass in sand, while it is hot enough to make the sand adhere to the surface of the glass.

Referring to the Drawings.
Figure 1, represents a side view of my improved spherical glass target.

Figure 2 is a sectional view of the same.
A is the glass ball, covered with the coating B.

Having thus described my invention I desire to claim:
Consists in Roughening the outer surfaces of glass target balls [substantially as described and for the purpose set forth herein.]*
New York City, New York, August 10th, 1878.

Witnesses
Jas. B. Willis
W.C. Dunham

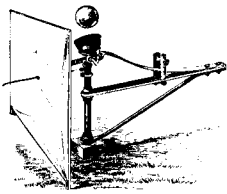
This is the specification referred to in the affidavit of Charles Albert Tatum hereto annexed.
Sworn to before me this 10th (Tenth) day of August 1878.

J.B. Morris[?]
Notary Public, N.Y.
No. 91 Duane St.
Cor. Bd. way

*The bracketed section has been crossed out in the Canadian Patent Office file copy of this patent.

WRIGHT'S IMPROVED GLASS-BALL TRAP.

PATENT APPLIED FOR.

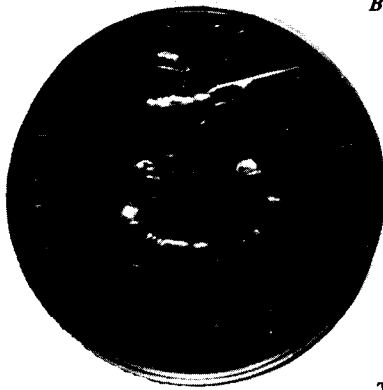


The frame of this Trap revolves on a pedestal (which is set firmly in the ground) so as to throw the Ball in any desired direction. The cup is also adjustable, giving any angle of Elevation to the Ball. When once fixed in position the Trap can not be displaced, or rendered unsteady, by any number of discharges. The velocity of the Ball can be increased or diminished at pleasure by sliding the buffer on the bar. By interposing a screen between the shooter and the Trap, the position of the latter is concealed, and the direction of the Ball's flight can not be anticipated, thus giving splendid practice for field shooting.

PRICE.	\$10.00.
SCREEN,	1.50.
GLASS-BALLS, per 1,000.	18.00.

FOR SALE BY **GEO. B. ELLARD,**
GENERAL AGENT AND MANUFACTURER,
144 1/2 WALNUT STREET, CINCINNATI, O.

The Sportsman's Score-Book for Glass-Ball Trap Shooting
FOR SALE AT OUR OFFICE.



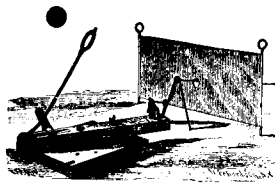
This trophy depicts a live pigeon shoot. It was probably won by George Rennardson in the 1860s. Rennardson was a Toronto gunsmith who was recognized as a wing shot of great note at the time. *James Christie collection.*

does not have either of the patented characteristics. The ball was acquired from the estate of a most astute collector/ researcher and with it was a note stating "Northrup & Lyman No. 2 manufactured by the Hamilton Glass Works." Northrup & Lyman were wholesale pharmaceutical merchants located at Toronto, and it would appear that at least one of the principals had sporting interests. A black powder can with the firm name on the label is known: this is a subject which bears further research.

The end of the glass target ball era began with the invention in 1880 by George Ligowsky of Cincinnati, Ohio, of a clay pigeon and a trap to send it further than could be achieved with the glass ball. They were easier and cheaper to manufacture, broke more easily when hit and were more spectacular when they broke. The elimination of an objectionable pile of glass left on the field was

THE HUBER CHAMPION GLASS BALL TRAP.

COMPACT AND DURABLE.



Balls can be thrown in any direction or elevation, unknown to the shooter, in an exact imitation of the pigeon's uncertain flight, a screen concealing from the shooter how the trap is set.

HEADQUARTERS:

BARTON & CO.

337 BROADWAY, NEW YORK.

Traps may be ordered through all dealers in sporting materials, or from the manufacturers, HUBER & CO., COR. PATERSON AND FULTON STREETS, PATERSON, N. J.

"I have used all traps in the market, and find Huber's Champion Trap the king trap of the world."—IRA A. PAINE.

Have received and are still receiving large orders from the first sporting houses in England, including W. & C. Scott & Son, Birmingham; Williams & Powell, Liverpool, and many others, as well as from all parts of the United States and Canada.

All sportsmen who have examined the trap pronounce it the best ever invented.

Glass ball traps as advertised in the *Sportsman's Score-Book for Glass Ball Trap Shooting* published by D. E. Holmes at Cincinnati in 1878.

This silver medal presented by the Hamilton Powder Company to George Andrew of the N.W. Gun Club at Winnipeg in 1892 depicts a live pigeon shooting scene or a trap shoot. it has not been seen by the writer.

an added advantage: the clay bird produced a much more acceptable sport.

By 1889 the glass target ball was no longer being offered for sale by leading Canadian dealers in sporting goods. Birds such as the "Matchless Blackbird," made of a composition material were produced for the Charles Stark Co. of Toronto, one of the leading sporting goods houses, and a composition ball made of rosin was still being offered at that time.

Although the glass ball for trapshooting was quickly replaced by the clay pigeon, glass balls continued to be manufactured until well into the twentieth century for use in the wild west type shows.

I would like to express my thanks to Messrs. James Christie, Raymond Hanning, Alex. Kerr, David Perch, and Gary French who have assisted in the preparation of this article. — *D.M.B.*