

Phonography

by George F. Paul

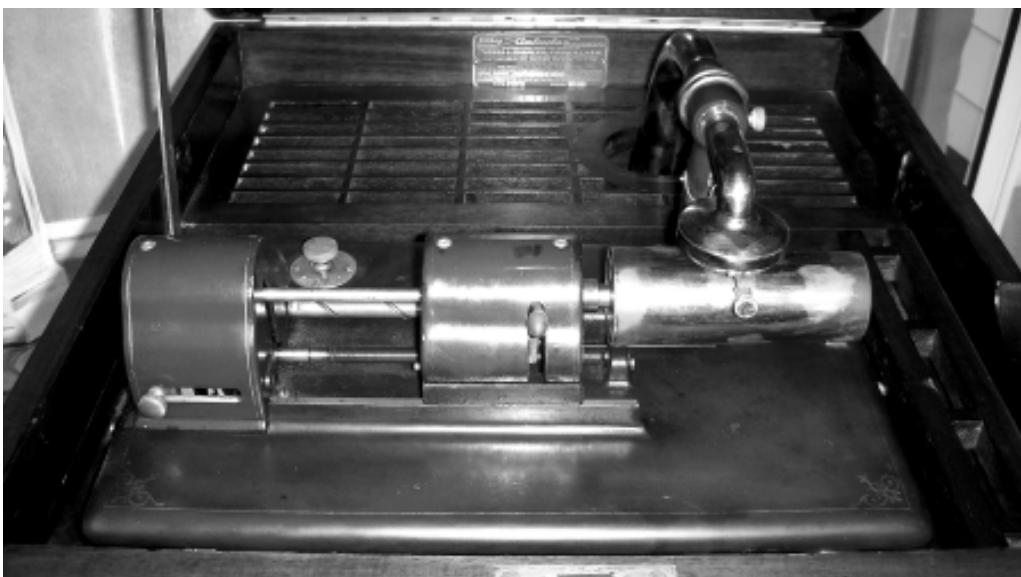
A Century's Retrospective: The Edison Amberola 1 (Part 1)

Comparatively little has been written about the appearance of the Edison Amberola in 1909 beyond the fact that it was the company's belated answer to the popular Victrola, which had first appeared three years earlier. From there, discussion often reverts to the importance (at the time) of a phonograph cabinet which concealed the horn, whereby the Victrola is acknowledged as having been the industry leader in this respect.

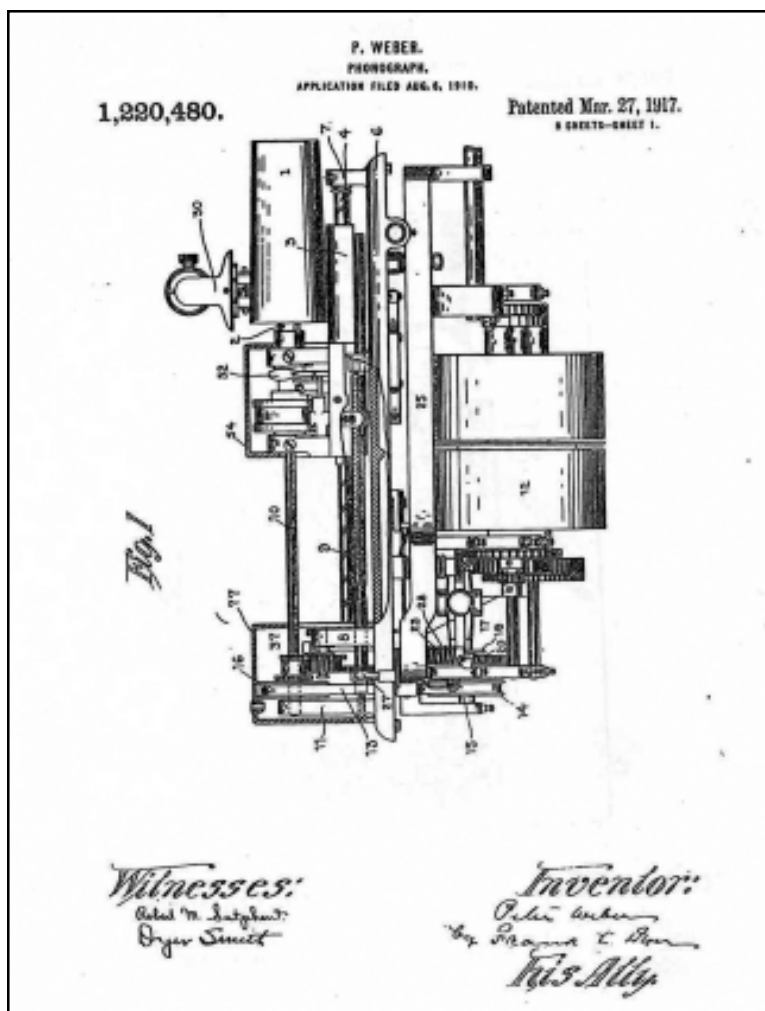
Among collectors and historians of sound reproduction, the Victor Talking Machine Company is generally regarded above all others as having made a success of the internal-horn talking machine. From the perspective of sales, this is undeniably true. However, the correlation between "sales" and "quality" is often a tenuous one. Although the Victrola's cabinets were first-rate in workmanship, the machines' sound quality (until 1925) suffered in comparison to external-horn models. The VTMC merely applied its existing sound-reproducing technology within a skin of fine wood, taking acoustic liberties with the size and shape of the horn for the sake of aesthetics. This succeeded in a business sense for nearly two decades for the simple reason that the public accepted the subordination of sound quality in deference to attractive

pieces of furniture. Cabinet was king.

The paradox of the Victrola's success story was Edison's first Amberola. To a large degree, the Amberola's quality was not apparent until the machine was played. Eschewing Victor's practice of merely installing existing machinery into a new cabinet, a magnificent new mechanism was designed especially for application within the Amberola's cabinet. The horn was fashioned of innovative non-resonant material, and the all-new reproducer remained stationary (a design not seen for thirty years), eliminating moveable joints and air leaks. As the gleaming maroon enameled mechanism rotated and laterally moved the shiny black cylinder record beneath a revolutionary new oxidized bronze finish reproducer, unprecedented sound quality was heard. The Edison organization, perhaps overly focused on the auditory results, had high expectations for the new Amberola. But lurking beyond the West Orange factory gates was the



Edison Amberola 1A mechanism with 2&4 minute "M" reproducer.



was designed more-or-less to merely circumvent the existing patents of the Victor Talking Machine Company. Edison's contemporary playing mechanisms, particularly that of the "Triumph," might easily have been pressed into service for the new model, but Weber clearly had aspirations beyond re-casing existing mechanisms:

*"My invention comprises the starting and stopping of the rotating mandrel by a lever...which, at the same time controls the adjustment of the stylus into or out of operative position, and also the engagement or non-engagement of the feed nut with the feed screw, this starting and stopping lever being preferably mounted upon the traveling carriage of a moveable mandrel phonograph, which is also provided with an automatic stopping means adapted to be operated to stop the rotation of the record, stop the feed, and place the stylus in inoperative position at a predetermined point ..."*²

relentless truth that the public's reaction to the cabinet would either make or break the fortunes of Edison's finest Phonograph.

For some time, Edison's dealers and jobbers had pressed the National Phonograph Company for an internal-horn instrument that could be offered as an answer to the Victrola. At a May 12, 1909 Executive Committee meeting, permission was granted to begin development of a concealed-horn Phonograph¹. Walter Miller was put in charge of the project, and he assigned a man who could well be regarded as the father of the Amberola: Peter Weber. It was he who would design both mechanism (U.S. Patent No.1,220,480) and cabinet (U.S. Design Patent No.40,347) for the new Amberola.

The mechanism was arguably the most innovative component of the first Amberola, as the cabinet

It has been noted that the traversing mandrel of the first Amberolas was a throwback to the 1870s and the Tinfoil Phonograph. It's curious that both Edison's crudest and most sophisticated Phonographs employed this feature. While its use at the dawn of recorded sound was no doubt prompted by its simplicity, its resurrection in 1909 enabled Weber to incorporate an immovable and air-tight sound path into the Amberola, contributing significantly to its sonic excellence. The convenience of an adjustable automatic stop and single-lever operation in the Amberola were added benefits. The playing mechanism was driven through a belt by a new two-spring motor, described by Edison as a,

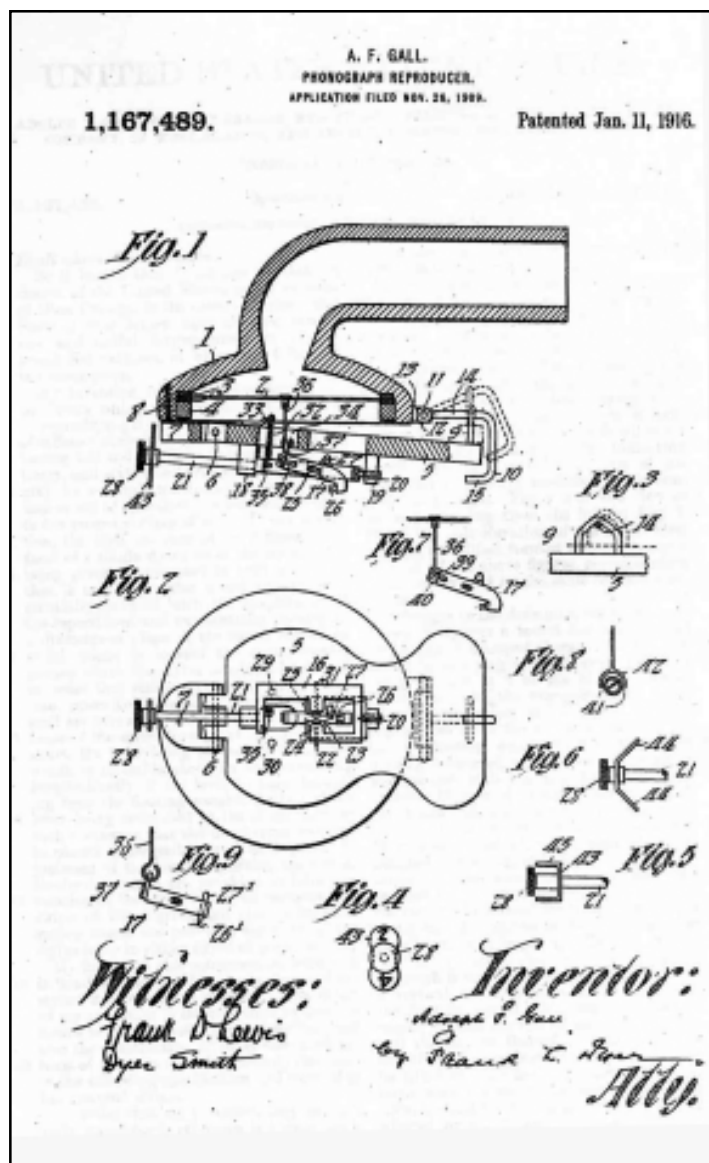
New and powerful double-spring motor. The spring barrels are very large, thus preventing the layers of the spring [from] coming too close together, and what is called chugging (one of the most ob-

jectionable features in the spring motor), is thereby eliminated. One complete winding of the two springs will play five four-minute Records, and in playing the last Record, the spring has the same force and strength as when playing the first Record.³

The Amberola's new mechanism was capable of playing either two-minute or four-minute cylinder records by turning a knurled knob 180 degrees. Obviously, a new combination reproducer would need to be developed, and this task was undertaken by Adolph F. Gall. His design (U.S. Patent No. 1,167,489) would eventually become the Model "M" Reproducer. Evidently, there were design/production difficulties with the new reproducer, so a simpler temporary expedient was supplied with the first Amberolas. This was the Model "L" Reproducer, capable of playing only four-minute records. Potential Amberola customers were assured that it could be exchanged for the new combination type reproducer as soon as the latter became available. In the meantime, the early Model "L" exhibited an unfortunate propensity for record wear, resulting in at least one recall.⁴ Finally in May 1910, the combination type Model "M" Reproducer became available in numbers.⁵ The revolutionary new Amberola at last had its proper reproducer.

But the various difficulties with reproducers for the early Amberola pale in comparison to the problems associated with Edison's subcontracted cabinet manufacturers.

Within six weeks of the company's decision to embark on the development of an internal-horn Phonograph, Peter Weber presented a prototype cabinet. Edison's patent advisor, Delos Holden, reported on July 2, 1909 that the shape of the lid, the presence of heavily carved corner posts, and a sealed-off motor compartment would invite litigation from Victor.⁶ Accordingly, Weber's final design featured a simplified lid profile, plain cor-



ner posts, and an open motor compartment separated from the playing compartment only by latticework. Samples were sent to furniture companies for quotations, and it was decided to accept that of the Herzog Art Furniture Company, dated September 1, 1909, for \$28.85 each. The Edison Phonograph Works rushed the Amberola mechanisms and hastily-developed Model "L" Reproducers into production as new cabinets began to take shape in faraway Michigan.

On October 18, Edison's sales arm, the National Phonograph Company, issued *Sales Department Bulletin No. 36*. It proudly stated,

Continuing the progressive policy synonymous



This prototype cabinet for the Amberola is probably the one examined by Delos Holden in the early summer of 1909. Note the lack of louvers. The lyre grille would be retained, but the heavily carved corner posts were dispensed with. Courtesy of the Mulholland Press, from The Edison Cylinder Phonograph Companion, by George Frow.

with the name "Edison," we are pleased to announce that a distinctively new type concealed horn Phonograph will be placed upon the market, on or about December 1st, 1909, which will be known as the "Amberola."

This latest Edison creation is the result of patient,

intelligent effort on the part of experts who are pioneers in the details of Phonograph manufacture, and who have succeeded in combining mechanical excellence with a highly artistic and useful record cabinet.

The "Amberola" opens up a new field for the dealer, as it will gain for him ready access to people of refinement and means, who have been anticipating a high-grade machine combining utility and perfection of tone reproduction...

Price: List price \$200 (\$260 to Canada), subject to a discount of 40 per cent.

Thus the stage was set for the introduction of Edison's finest cylinder Phonograph, and one of the worst marketing debacles in Edison's history.

(Part two of this article will appear in the June 2009 issue, and will include the names of all who have assisted me in this research. It will primarily focus on the story of the early Amberola IA's cabinet and the model's evolution into the IB. These early Amberolas contained the finest playing mechanisms and horn of any Edison cylinder Phonograph. If you own one of these venerable instruments, consider yourself truly fortunate!)

George Paul welcomes comments and/or suggestions at gpaul2000@aol.com or 126 South Main Street, Mount Morris, NY 14510.

NOTES:

- 1) Frow, George, *The Edison Cylinder Phonograph Companion*, 1994, p.153.
- 2) U.S. Patent No.1,220,480. Interestingly, Weber did not file this patent until August 6, 1910, nearly a year after Amberola production began. Pending litigation against the U.S. Phonograph Company of Cleveland, Ohio may have finally prompted this action.
- 3) *Sales Department Bulletin No.36*, October 18, 1909, as printed in *The Edison Phonograph Monthly*, November 1909, p.26.
- 4) *The Edison Phonograph Monthly*, April 1910, p. 2.
- 5) *The Edison Phonograph Monthly*, May 1910, p.10.
- 6) *The Edison Cylinder Phonograph Companion*, pp. 153-154.

One Collector's Perspective

by George Paul

One might say that this article was begun 25 years ago. As soon as I placed an Amberola IA in my collection, I began jotting down information on IAs encountered at shows and in other collections. It became evident that the serial numbers did not jive with what I'd read. Reportedly, only the first 500 Amberolas featured lyre grilles, yet my own lyre-grilled example was No.2876. In a letter to Leah Burt of the Edison National Historic Site dated 11/15/85, I stated, "It is impossible (I think!) that almost 3000 lyre-grilled models were built. This leads me to believe that mechanisms were stockpiled waiting for cabinets, and were thus dropped into them non-consecutively as the cabinets became available." That was a pretty good guess based on the material available to me at the time. Little did I realize the role Edison's cabinet manufacturers played in the early marketing of the Amberola.

Over the years I examined many Amberolas, and took notes – most of which can now be described as scanty. I seriously re-opened my Amberola research in October 2008. With the advent of the Internet, it is now possible to canvass large numbers of Amberola IA owners to gather data on cabinet variations. Posting queries on antique phonograph message boards and lists resulted in a truckload of information. And I suddenly began to realize how much we didn't know about the Amberola cabinet situation. My initial survey of only four cabinet characteristics eventually grew to eighteen, and I fear that some of my correspondents became sorry they ever answered my emails! Robert Baumbach and Ron Dethlefsen were particularly helpful, sending scans and copies of original documents. With enough of these disparate puzzle pieces, a general picture emerged, yet there are still tantalizing gaps. I continue to solicit more data for the second installment of this article. If you own an Amberola IA or IB, please consider sending me your answers to the questions below:

- 1) *TYPE: (IA or IB?)*
- 2) *SERIAL NUMBER: (Do cabinet and mechanism plate numbers match?)*
- 3) *LID: (Smooth sides or stepped sides?)*
- 4) *UPPER FRONT CORNER POSTS: (Carved or plain?)*
- 5) *GRILLE: (Lyre, or Transitiona l[1st Rococo], or 2nd Rococo, as seen on pg. 163 of Frow?)*
- 6) *FRONT DOOR BOTTOM EDGE: (Wavy or flat?)*
- 7) *DRAWER INTERIORS: (Wooden separators or metal clips?)*
- 8) *NUMBER OF VENTS/LOUVERS ON SIDE: (2 or 3?)*
- 9) *LENGTH AND WIDTH OF LONGEST VENT/LOUVER:*
- 10) *ARE THE FRONT FEET CLOVEN HOOVES?*
- 11) *INTERIOR GRILLE: (1-piece or 2-piece? Rectangular lattice or curlicue?)*
- 12) *HEIGHT OF CABINET: (Please note if with/without casters.)*
- 13) *DO DRAWER FRONTS TOUCH EA OTHER WHEN CLOSED, OR SEPARATED BY WOODEN TRIM?*
- 14) *WHAT IS THE CABINET NUMBER STAMPED IN WOOD UNDER THE HORN?*
- 15) *ANY PENCIL/CHALK MARKINGS ON THE INTERIOR? (Please be specific.)*
- 16) *IF DRAWERS CAN BE REMOVED, ARE THERE MARKINGS ON THE OUTER REAR WALL OF DRAWERS? (Again, specificity would be helpful.)*
- 17) *DOES LOCK TAKE A FLAT KEY OR A ROUND KEY?*
- 18) *ARE THERE ANY MARKINGS ON THE LOCK? (Code letters/numbers?)*