The Mazda Lamp Story...

On December 21, 1909, General Electric first used the name Mazda on their lamps. The name was trademarked, and assigned the number 77,779 by the United States Patent and Trademark Office. Today, we associate the name with automobiles, but when it was first used by GE it was chosen to represent the best that the American lighting industry had to offer at the time, and was selected due to the fact that Persian mythology gave the name Ahura Mazda to the god of light.

The earliest light bulb filaments were made of various carbonized materials, including bamboo. Light output was rated in candlepower, with 1 candlepower or (1CP) being roughly equivalent to the light output of a single beeswax candle. Most carbon Christmas lights were rated at either one or two CP, but in actuality the output from each lamp varied widely. Practically speaking, it was virtually impossible to accurately rate the output from carbon filaments, even though each filament was made to the same standards.

In the early days of electric light bulbs, most of the bulb manufacturers each had their own set of production standards, and light bulb quality and light output was quite different both from brand to brand and from lamp to lamp within each brand. Lamp bases were not standardized, and light output ratings would vary greatly. This inconsistency was most frustrating to the consumer, which resulted in less than stellar light bulb sales. In 1909, General Electric came up with the idea of a set of manufacturing specifications to which all
American lamp manufacturers could adhere, thereby effectively "standardizing" light bulbs in the United States.

1917 ink blotter designed by Maxfield Parrish

General Electric's new service would be available for a price to all lamp makers who subscribed, and the MAZDA name would be widely advertised by GE in almost all of the popular magazines of the day. The MAZDA name and standards were available for license only for lamps using tungsten filaments (see NOTE below). Tungsten, a vast improvement over the carbon filaments, had a brighter, whiter light output which was much more even from lamp to lamp, assuring equal brightness when used in a string of Christmas lights. Improvements to household light bulbs were not usually incorporated into the small and much less used Christmas light bulbs until several years later due to increased production costs, and the use of tungsten in the manufacture of Christmas lamps did not appear until about 1916. It had been available in household lamps since 1907.

This ad, from the a 1917 issue of Popular Science magazine, explains the Mazda "mission", and reads as follows:

"NOT THE NAME OF A THING, BUT THE MARK OF A SERVICE."
"The new light that MAZDA service throws on lamp-manufacturers' problems is reflected in the brighter, whiter light that MAZDA Lamps give in your home."

"The Meaning of MAZDA"

"MAZDA is the trademark of a world-wide service to certain lamp manufacturers. Its purpose is to collect and select scientific and practical information concerning progress and developments in the art of incandescent lamp manufacturing and to distribute this information to the companies entitled to receive this Service. MAZDA Service is centered in the Research Laboratories of the General Electric Company at Schenectady, New York. The mark MAZDA can appear only on lamps which meet the standards of MAZDA service. It is thus an assurance of quality. This trademark is the property of the General Electric Company."
Many of the lighting companies then in business licensed the MAZDA name, among them the various Edison divisions of GE, Westinghouse and National companies. Most Christmas lamps after about 1925 or so will be found with either the General Electric or Westinghouse name on them, as the pair was by far the largest supplier of Christmas and other light bulbs in the United States. Westinghouse first used the Mazda name in 1912.

In 1921, GE further specified particulars to licensees of the Mazda name with the following regulation:

"Words that are descriptive of the appearance of the lamp will precede the word MAZDA, as in the case of the White MAZDA lamp. Words descriptive of the function of the lamp will follow the word MAZDA, as in the case of the MAZDA Mill Type lamp, the MAZDA Train Lighting lamp, or the MAZDA Motion Picture lamp."

General Electric heavily advertised their MAZDA trademark in one of the most successful advertising campaigns in history. The lamps were more expensive, but promised better, more reliable and economical operation. The 1917 ad pictured here on the right is typical of those found in many magazines of the time. It compares the "wasteful carbon shape" to the tungsten filament. Bombarded with ads like these, the buying public gradually abandoned their old carbon filament lamps in favor of the new tungsten.

In about 1920, the Edison Mazda division of General Electric commissioned world famous artist Maxfield Parrish to create a series of calendars and other advertising paraphernalia based loosely on major events in the history of lighting. The picture on the left is from a 1923 calendar and is entitled "The Lamplighter of Baghdad". (Apparently neither the Edison companies nor Parrish himself caught the misspelling of the name "Baghdad"). Parrish's beautiful and most effective works of art created for this advertising campaign are highly collectible and most sought after.

UPDATE: Web site visitor Jerry writes with information about the spelling of Baghdad mentioned above. Jerry writes: "You mentioned in one spot that Baghdad was misspelled in a GE ad, the incorrect spelling being "Bagdad." Actually, Bagdad is or was an acceptable spelling for the name of the city. Check it out in an old dictionary, atlas, or encyclopedia. Foreign spellings often change. I remember when Vietnam was spelt Viet-Nam." The author is grateful to Jerry for taking the time to write with this information.
By 1920 or so, the conversion to tungsten in the Christmas lighting industry was complete. The major exception was with lamps imported from Japan, many of which continued to utilize carbon filaments until 1927. This was most evident in their clear glass figural lamps, but smooth cone miniature base C-6 lamps from Japan can be found with carbon filaments as well. Pictured below are two examples of these late 1920s Japanese lamps:

Pictured here on the left is a typical 1920s ad by General Electric/Edison Mazda, and is from the December 12, 1925 edition of The Saturday Evening Post. The charming picture is by book illustrator Rundle. The ad promotes the use of electric lights for the Christmas tree and reads in part:

"Nothing adds so much to Christmas cheer and the decoration of your home as electric light. It is the least expensive of the season's joys. For the cost of an old fashioned Christmas tree candle, for the cost of a few tree ornaments, you can light up your whole house in a blaze of cheer. And keep the cheer of Christmastide in your home throughout the year. Use light freely, for electric light is the cheapest light the world has known. Just remember that the best and cheapest light lamps to burn are Mazda Lamps. Mazda-the mark of a research service."

"Edison Mazda Lamps are a General Electric Product."

As the decade of the 1930s began, Americans had fully accepted the MAZDA name as a symbol of quality for their Christmas light bulb needs, and many outfits proudly proclaimed the inclusion of MAZDA lamps in their sets. Only the economic factors continued to be a bit of a hindrance, as a typical MAZDA Christmas lamp sold for 5 cents, while the Japanese tungsten equivalent were two for a nickel. Competition from the Japanese became more fierce as the effects of the Great Depression settled in, and many lighting outfit advertisements from NOMA and General Electric urged the buying public to "Buy American". Comparison studies of American MAZDA versus Japanese tungsten lamps were commissioned by both General Electric and Westinghouse. Although the test criteria would probably not withstand close scrutiny by today's testing standards, results of the studies showed an average life of 46.8 hours for the Japanese tungsten lamps, compared to an average 207.4 hours for a MAZDA tungsten lamp, a dramatic difference. Nonetheless, the Japanese lamps gave good enough service to be huge sellers up until the beginning of World War II.
General Electric dropped the Mazda trademark in 1945, and ceased licensing the name as well. This cutoff date gives the collector a handy benchmark to use when trying to apply a date of manufacture to a light bulb. Only leftover stock carried the Mazda name on any General Electric or Westinghouse lamp sold after the 1945 cutoff.

Special Note: Recently collectors have been reporting examples of carbon filament lamps with the MAZDA name stamped on them—in fact this collector owns several such examples of Christmas lamps. In the case of standard size lamps, this can easily be explained. In the early days of lighting, light bulbs were so expensive that they were often "renewed" after they burnt out. Renewing a lamp meant carefully cutting it open, inserting a new filament assembly, establishing a new vacuum within the globe and then resealing it. This process was most often accomplished with carbon filaments, as they were less expensive and easier to handle. A light bulb that started life with an expensive tungsten filament was likely to be renewed with a more cost effective carbon one.

With respect to Christmas lamps, the explanation is not so easy. Miniature lamps were not renewed due to the expense involved. It is well known that lamp technology was often not applied to miniature Christmas lamps until well after its introduction and incorporation into full size light bulbs. The most reasonable theory as to why the MAZDA name appears on carbon filament miniature lamps would be that as the industry changed over, Christmas and sometimes other less critical lamps were manufactured using bases from another a different manufacturing line with little regard to the marking. This collector knows of no existing advertising referring to carbon filaments lamps as Mazdas.