



News & Views

Morgantown's Filament Stems

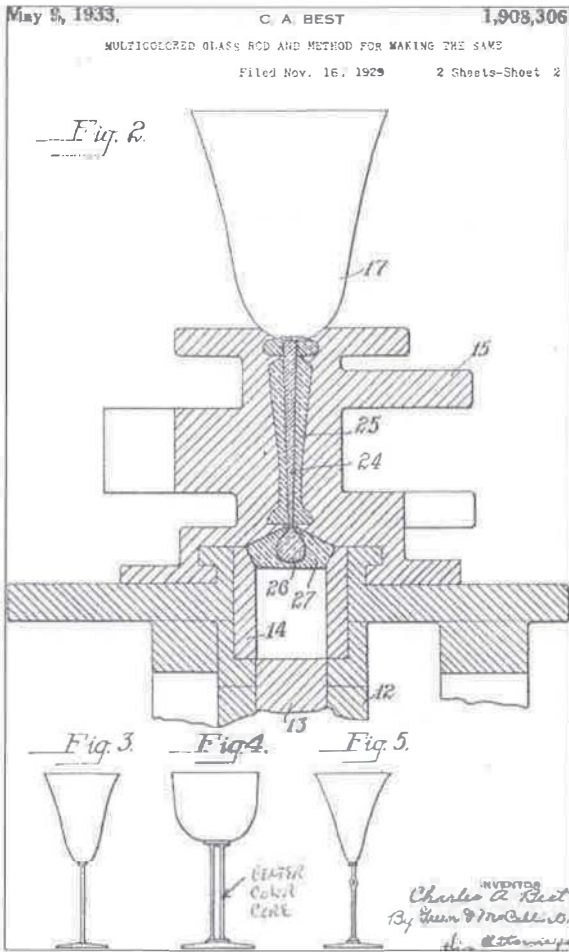
By Bert Kennedy

Have you ever wondered how Morgantown Glass Works made their famous filament stems? What, you don't even know what a filament stem is? Well look at the photo below. You will notice a core of color cased inside a crystal stem.



This was all formed inside of a cast iron mold with a unique machine.
But how did they do it?

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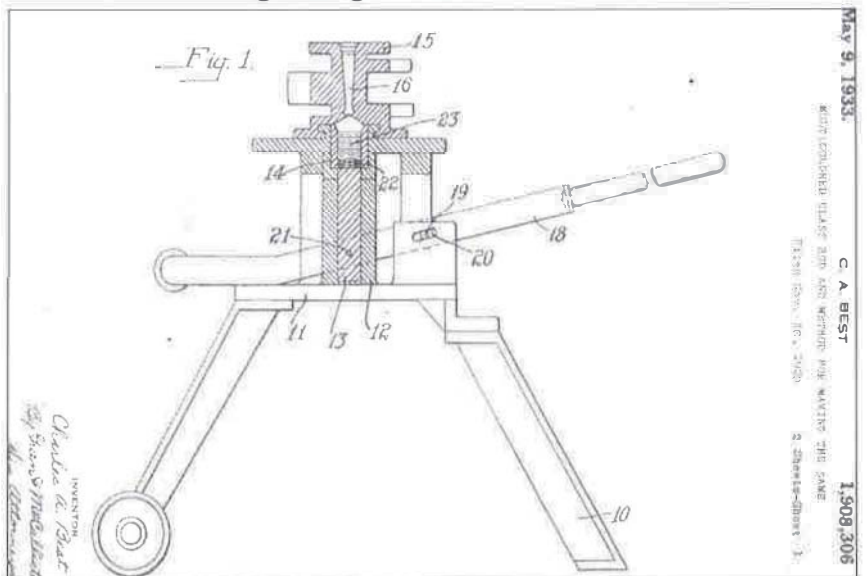


The patent, 1908306, was granted for this intriguing but very simple machine May 9, 1933 to Charles A. Best. In the patent you will find a very detailed, almost daunting, account of the operation of the patented machine. You can choose to read the detailed account with every detail shown or you can go with my "filaments for Dummies" version.

Each stem design had its own unique cast iron mold shape as we see in this first drawing. It was attached to the basic machine making it ready for production.

Looking at this example mold used in the patent you will notice it is for the 7606 'A' Athena stem. To add even more variety to the glass production you will find many different bowl shapes employing the same stem line. Morgantown used this method in many different lines both filament and non filament.

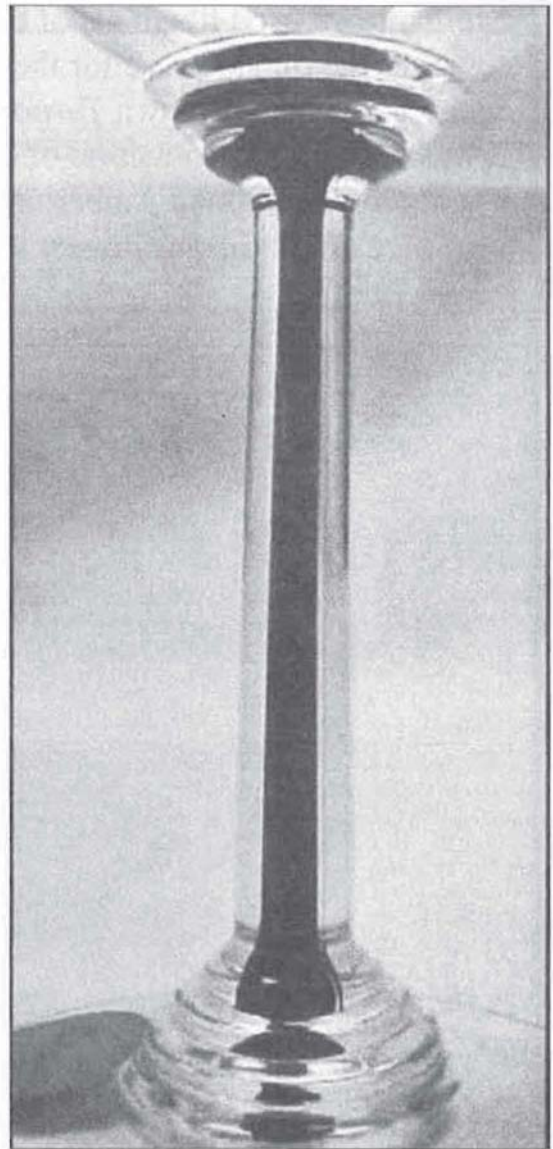
The machine itself is shown in this next drawing using the same Athena cast iron mold attached and ready for the production process. Below the mold was a plunger for the molten glass (fig. 22), the plunger arm (fig. 18), attached to (fig. 21) and (fig. 13) the plunger rod. A very simple design which would allow the worker to put great pressure on the molten glass to force it into the cast iron stem mold.



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Now for the process:

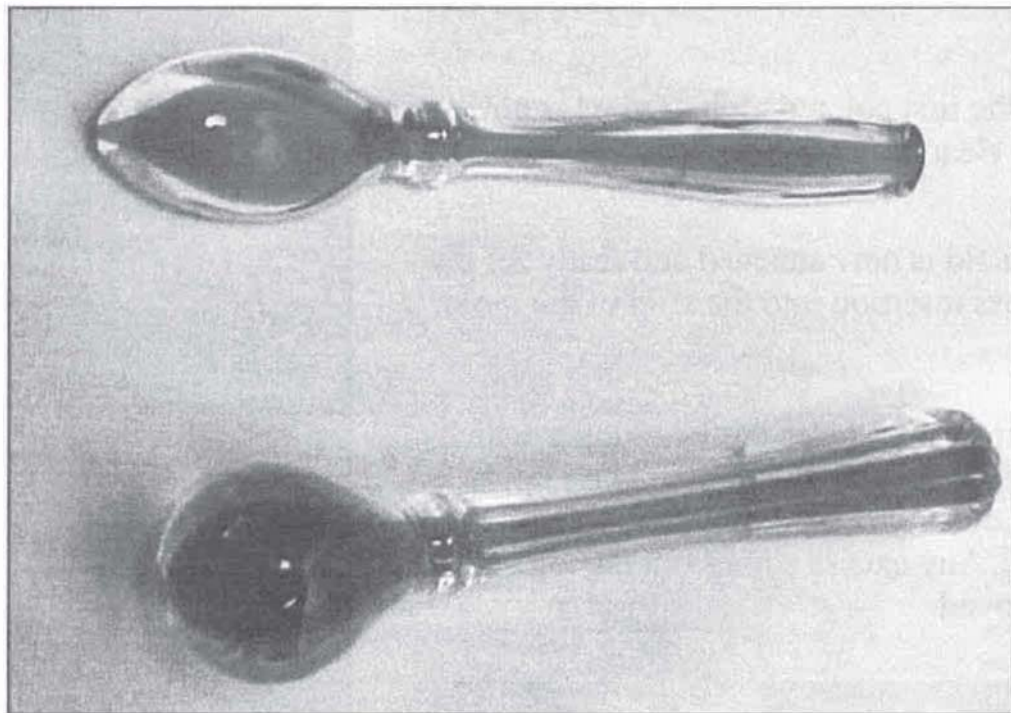
1. The plunger is lowered down the cylinder.
2. The molten glass glob, colored core first, is placed on top of the plunger close to the center.
3. On top of the first colored glob of glass is now placed the clear molten glass right on top of the colored glass.
4. The stem mold is now attached and ready for the molten glass insertion into the void of the mold.
5. The worker pushes down on the plunger which raises the plunger with the molten glass upwards forcing the color and clear molten glass into the void of the mold. Any excess comes out the top and is neatly removed.



The neat thing about this operation is that the color core courses up through the center of the crystal molten glass in a most unexpected manner with perfect distribution according to the shape of the stem. So in one smooth operation we have color, perfectly centered in a case of clear glass.

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Morgantown used filaments of black, blue, green, and red. So far only crystal has been found as the outside case for the colored center. The only other color mentioned was found in the Morgantown *Turnover Topics*, a company newsletter, dated March of 1935. It was used in the production of spoon and ball muddlers with filaments. (see below) That color was named Amberola. It has a yellow center fading to red on the ends. A very nice effect for the already special Morgantown Filament



Glass Articles Desperately Needed

I am now officially out of articles and so I'm sending out this emergency appeal:

This extra section depends upon you. If you want more glass education articles, you must submit them.

The only thing glass collectors love more than buying glass, is talking about it.
We'd love to have you teach us about the glass you collect.

Please send your articles to me at editor@ndga.net. Remember, I can't print what I don't have.

Rosemary