

A Defiance Machine Works Find

by Jack Devitt

Before, during and after writing a book titled "Ohio Toolmakers and Their Tools", I had looked and looked for a tool marked The Defiance Machine Works of Defiance, Ohio to add to my collection of over 3,000 Ohio made tools. Since my book alone took about six years to write, the period of looking for a tool marked The Defiance Machine Works probably took close to twenty years. Since the city of Defiance is only thirty miles from my home in Ottoville, OH it would seem that this should be an easy task. I attended two to five auctions a week plus attending all the Mid-West and Ohio Tool Collector's meetings looking for Ohio made tools. In addition I went to many flea markets and looked through numerous antique shops as well as malls. Still I found nothing with the Defiance Machine Works mark. I found many other Ohio made tools and many of these are pictured in my book.

What I Did Find?

I did find a 1910 catalogue of The Defiance Machine Works. I also talked to Elmer E. Myers, a man who had worked for the company and had written ten pages about the history of the company. He sent me the history. These two items gave me many pictures and information about the tools they made for my book. But I still had no tool marked The Defiance Machine Works to add to my collection of Ohio made tools. I really had given up on finding one. Two and a half years ago I had decided to sell most of my collection of Ohio made tools. So what happens now? Last summer at a tool meeting near Delaware, OH it finally happened.

Wow! I Finally Found One

While I sell tools at the tool meets, I generally do not have the time or take the time, anymore to look around at other member's trade tables. However, someone came to me and said John Kinnemeyer from Cincinnati, OH had something I might be interested in. So I went to where he was located and sure enough there was a piece

I had been looking for during the past twenty years. It was not close to being a mint piece, as you can see by the picture at the bottom of the page. As a matter of fact it was a little on the rough side, kind of ugly, and measuring about 40 inches long, but in the middle it was marked "The Defiance Machine Works of Defiance, O. Patented June 27, 1882". When I saw it, I had no idea what it was or how it was used. John said he thought it was some kind of scale to weigh planner blades.

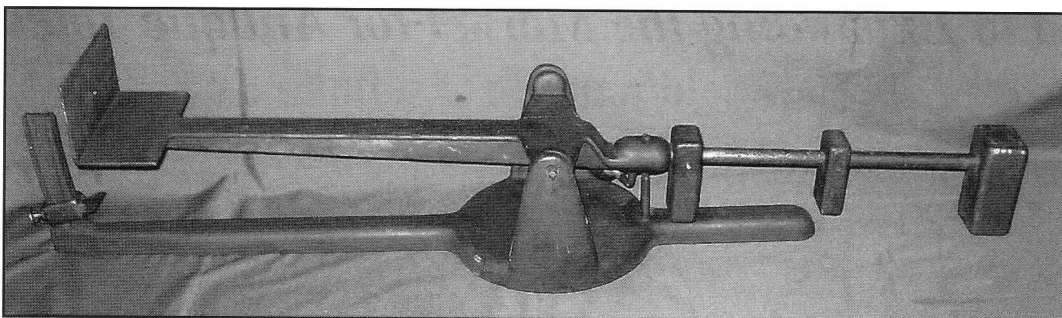
At this point I really did not care what it was used for, I only knew I wanted it and the price was right. After finding a drawing of it in my 1910 catalogue, I discovered it was called a proportional knife balancing machine. It was used to balance the cutter blades after sharpening so every one placed in a revolving head would be the same weight to avoid shaking and chattering.



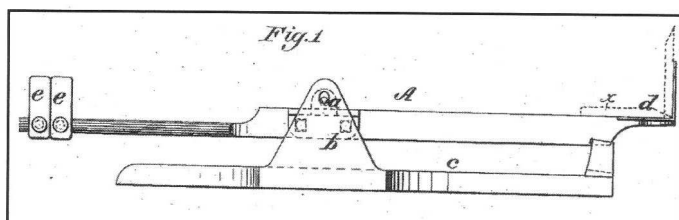
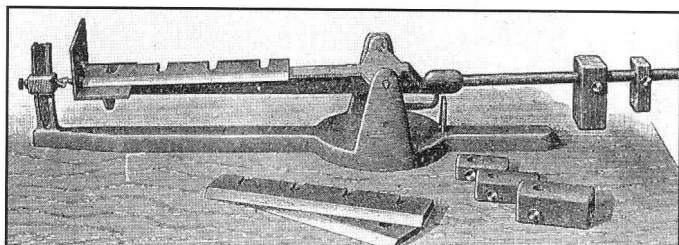
Now What Do I Do With It?

I enjoy making displays for the Mid-West Tool Collector's meeting and have won several best of show plaques, plus several judges choice awards. The past few years, due to my age, it has been very difficult for me to prepare the display, load them up, cart them into the display room, set up the display, take it down, and then load it up again. I have

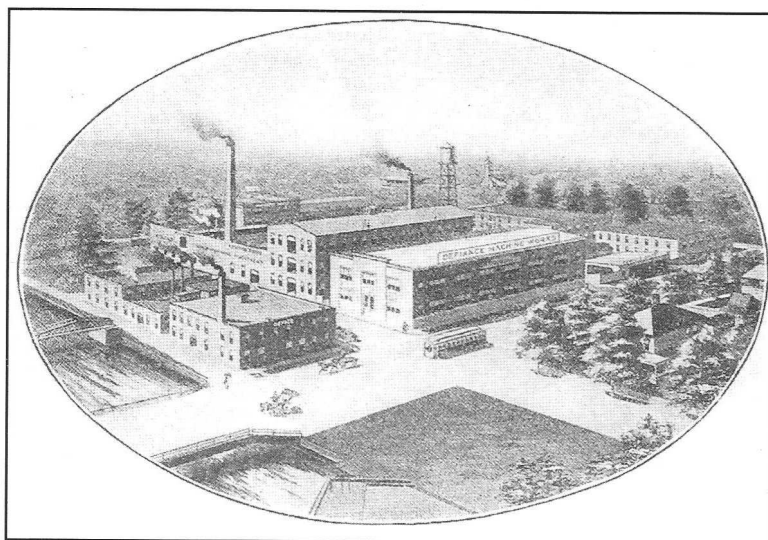
always said that I enjoy everything about tools: the buying; the cleaning; the research; the displaying; and selling; but the lifting and hauling, I could really do without. Therefore, at the last Mid-West Tool Collectors meeting I said this is my



last display of a grouping of tools. I did leave open the possibility of a one tool display. So on the previous page is a picture of my one tool display at the Camp Hill, PA Mid-West Tool Collector's meeting.



This display won the "Best One Tool Display" at the meeting. I included some information about The Defiance Machine Works which I had from my research when doing my book. I enlarged a picture that was in the catalogue which is shown in the top photo above. This was just one of the over 250 drawings that were illustrated in the catalogue.



Although I had asked for only a half a table display when I started to put all the materials together, I found I needed a full eight foot table which I easily filled with related paper materials, which was easier then hauling around a load of tools.

The drawing above marked Fig. 1 is a picture from the patent papers. It was patented by Charles Seymour of Defiance, Ohio and then assigned to The Defiance Machine Works. Since I only had the date June 27, 1882 on the name plate I had to obtain the Number 260,127 in order to get the full patent papers from our computer.

Information About The Defiance Machine Works

Most advertisements and literature say the company started in 1850. However, the name of the company in 1850

was the Kimball & Frank Foundry and Machine Shop which made all sorts of castings, engines, boilers, shafting, pulleys, hangers, plows, and did general shop work.

Sometime after 1859 the company was owned by Seaman & Stevens and in 1856 it was leased by Peter Kettenring who in 1858 sold the plant to Strong Brothers.

In 1864 the plant was destroyed by fire. It was shortly rebuilt under the name Kettenring & Strong. In 1869 William Lauster became a partner in the firm and it became known as Kettenring, Strong and Lauster.

The company became a stock holding company in 1872 and was then known as The Defiance Machine Works and Peter Kettenring was chosen as President. It was about this time when the company was really known for its woodworking machines. In my research work, over twelve years, and authoring two books about toolmakers, I found many companies really did not start out with the original name. Most people think this was the

company's name when starting because of the date as posted on ads and catalogs. This early date was used to make people think they were a business with a long time reputation but many times that name was not in business for the entire length of time.

In 1890, William Kettenring, the eldest son of Peter, became the active head of the company until 1912. It was under his leader-

ship that the company gained worldwide recognition for producing the finest machines available for making wood products.

The picture above is a drawing of the Defiance plant in 1910. By 1920 it had added a new foundry and covered 200,000 square feet which included three city blocks. At this time the factory employed 700 workers, making it one of the largest in the nation.

In 1912 Charles Henry Kettenring took over management of the company. It was definitely one of the world's largest makers of woodworking machines. It was said at this time 90 percent of all rifle stocks in the world both military and sporting were made on Defiance Machine Works machines. Between 1918 and

1921 the Machine Works had designed and built gas and gasoline engines along with special machines to make the engines, for Willeys, Lincoln, Hummer, Packard, and many others.

In 1922 Edward M. Hummer started to manage the company. In 1938 the company was purchased by the Toledo Scale Co. of Toledo, Ohio. Shortly after the Toledo Scale took over they renamed the company "Toledo Precision Devices" but soon learned that the world renowned name of "The Defiance Machine Works" was of great value so the name was changed back.

During the 1940s, the Government declared the Machine Works to be a National Defense plant. The United States asked them to build 25 of their horizontal boring mills per month. This they did and then the Government asked them to manufacture several other machines. They built Hanchett rotary surface grinders, Michigan gear shavers, steam turbines to power oil tankers and gas turbines to power light cruisers for the Navy. In addition they had to tool up to build a large number of automatic cross shell turning lathes to turn out 105 and 155mm projectiles for the Army and Navy. They built three large 28 spindle drilling machines for Chrysler to

drill 504 holes in large diameter steel plates. The workers at the Defiance Machine Works did not know until some time after the War had ended that these machines were a part of The Manhattan Project which produced the Atomic Bomb which in turn brought about an early end to the War with Japan.

In 1945 Hugh D. Bennett and Geoffrey R. Bennett bought the company from the Toledo Scale Company. In 1949 after the death of Hugh Bennett, Geoffrey had no interest in running the company so it was put on the auction block. With no interest, it was sold out piece-meal and the company was officially ended on Sept. 21, 1949.

Below are pictured some of the over 250 belt driven machines illustrated in their 1910 catalogue. What ever happened to all of these machines was a question I asked many tool collectors. A consensus of those asked seemed to think they were probably melted up during World War II and used in making military machines.

Now the only thing left in Defiance, Ohio is the name Defiance Machine Works at the top of a building near downtown and a golf course that is named Kettnering Golf Course.

