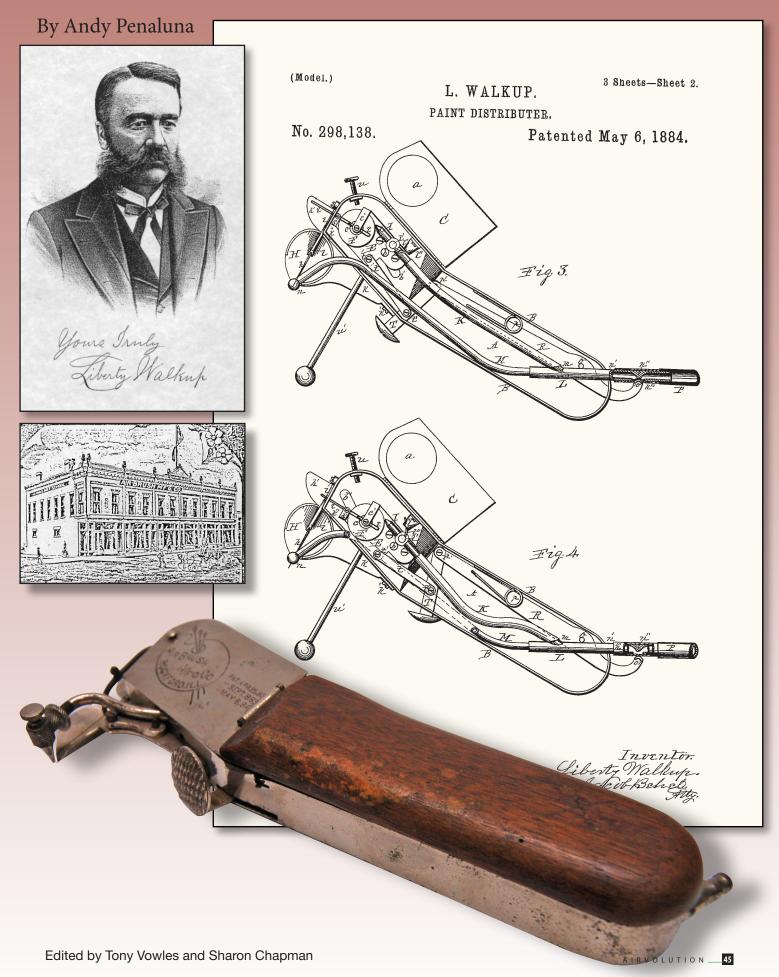
THE WORLD'S FIRST AIRBRUSH



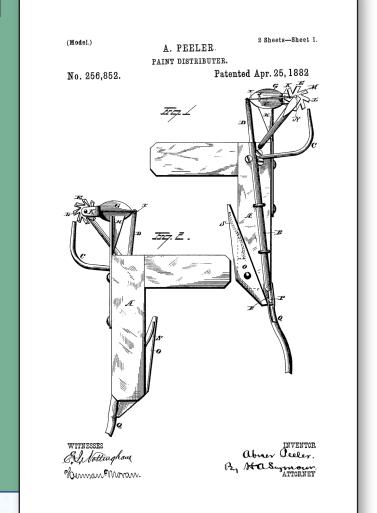
1879 - The year of invention

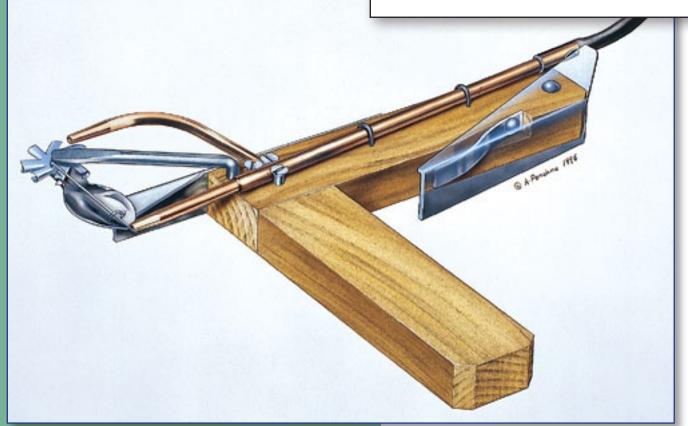
In 1879 an eccentric jeweller from Iowa assembled;

- a jam spoon
- a sewing machine needle,
- a bent over screwdriver,
- old soldering pipes,
- some bent metal

.... and screwed it all together on some blocks of wood!

Coupled with his own patented hand pumped air compressor he named it his; "Paint Distributor", for the painting of watercolours and for other artistic purposes.



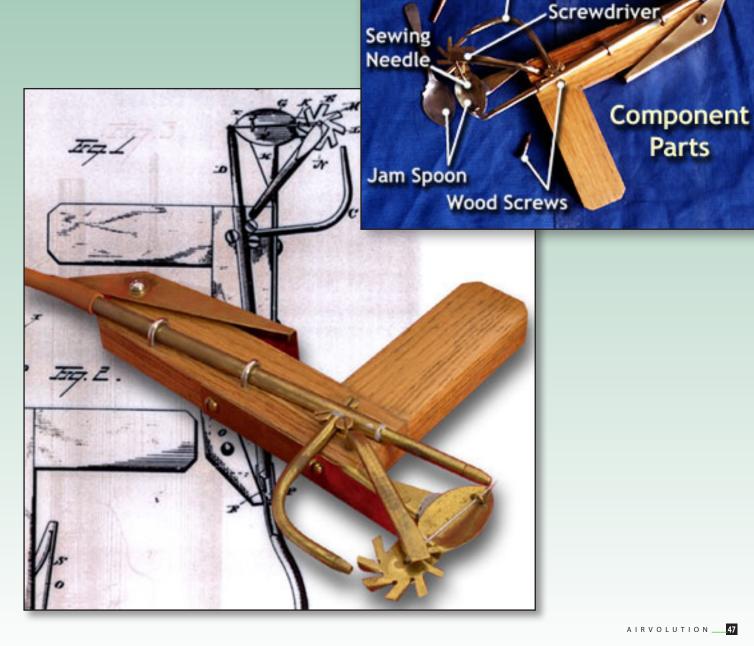


Soldering Torch

Building an original replica

To fully understand the way that the "paint distributor" worked a model was commissioned. This was made following the exact details found in the original patent drawings. An exception was made with the nozzle outlets which are interchangable to allow for further experimentation.

The inventor was a jeweler and he undoubtedly made the original prototype from various things found to hand in his workshop. The only component of any complexity being the windwheel, it must have been hand crafted.



Parts

1879 - Abner Peeler - Inventor

Abner Peeler was the inventive genius behind the first airbrush. One of the many unsung heroes of his day, he came from a family who were jewellers by trade and inventors as a sideline.

He designed sewing machines, developed an early version of a typewriter some 20 years before one was patented, and even Airguns, a weapon that was considered unfair, as they would not be heard by the enemy when they were fired!

As this article notes, he sold the original model for \$10 and went on to sell the patent to the Walkup Brothers in 1882 for \$700. Quite a sum of money for that time.

Peeler was not one to develop his own ideas and always sold them on whenever possible.



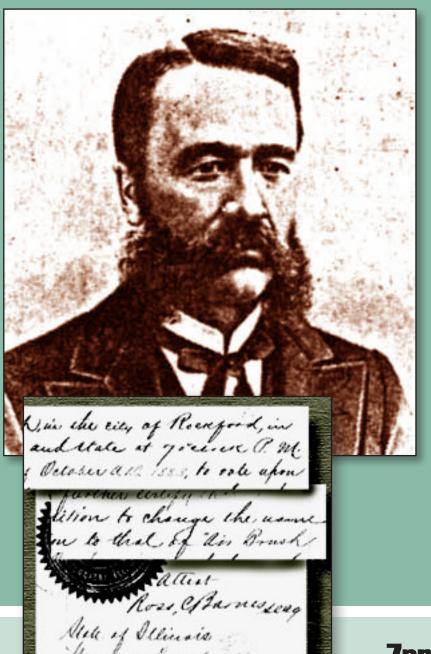
1882 - Liberty Walkup - Airbrush Pioneer

Peeler's design, whilst proving the principle would work, still needed considerable development to make it a viable business proposition.

Liberty Walkup was willing to invest in the idea and paid \$700 dollars for the initial design followed by another \$150 for two updated prototypes. Peeler signed over the invention in April 1882 and by August was able to sell 63 of the paint distributors at a Photography convention.

The Airbrush Manufacturing Co. of Rockford, ILL. USA

The next 3 years saw the launch of the "Airbrush Manufacturing Company" and the invention of an all new industry that would spread worldwide.



His Nickel Plate works was followed by a manufacturing company which in turn became the "Airbrush Manufacturing Company" of Rockford Illinois.

Together with his wife Phoebe, who was an accomplished watercolour artist, Liberty set about demonstrating the advantages of the new "Airbrush", most notably in terms of speed of rendering.

As a result when the company was formed, \$35,000 of stock was raised in the first half hour and \$50,000 by the second day!

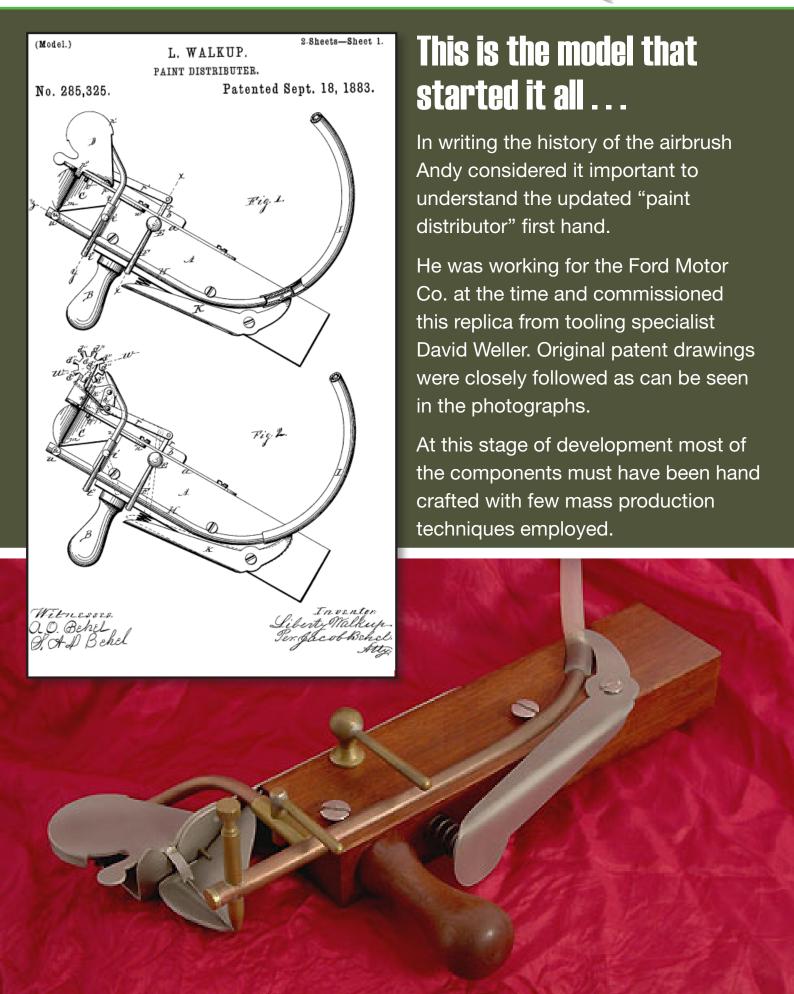
With this level of business support Liberty Walkup was able to seriously start developing and marketing the Airbrush.

7pm, **October 6th 1883** . . .

A date for airbrushers to remember. At precisely 7pm on 6th October 1883 a meeting was called in the offices of local attorney William Lathrop. The Rockford Manufacturing Company changed its name to the "Airbrush Manufacturing Company" and the name "Airbrush" was officially born.

Details of the actual document are still on record as can be seen above.





Building a replica

Take a close look at the mechanism being adjusted and the wind wheel operating.

Click on the image right and it will launch the movie.

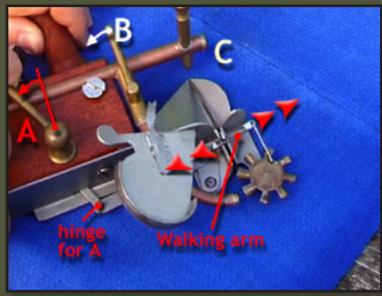


1882 Model - Detail

3 main features make this model different and more controllable than it's predecessor.

- 1. Most importantly, at 'A' a lever controls the distance that the needle passes under the air blast via a cleverly designed "walking arm" mechanism. (See below)
- A second lever can be twisted at 'B' to limit the amount of air pressure that spins the wind wheel.
- 3. The airflow is no longer spraying the paint forwards over the needle, but is directed downwards onto the artwork.







1885 - Airbrush Production

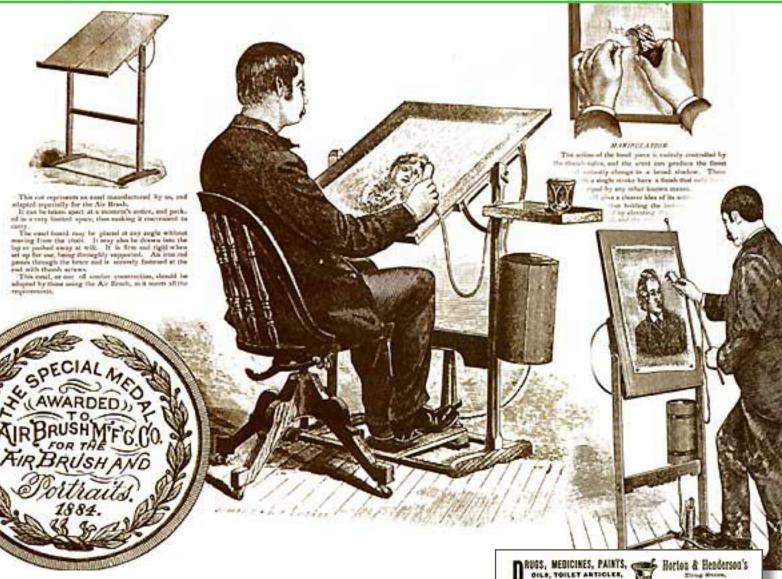
Patented in January 1885, the production model Airbrush came in a smart black case complete with spare needles in a glass jar and a tool kit of a screwdriver and tweezers. The two spare paint spoons at the top of the box were spare parts that could be ordered from a parts catalogue.

Mass production techniques were employed so each airbrush carried an individual number on the reverse of the handle to identify it.

The complete working kit, including a pump and air tank, would cost the purchaser \$40 although a 6% discount was available for C.O.D. orders. This price soon rose to \$50 as sales rose via offices in New York, Philadelphia and Chicago.



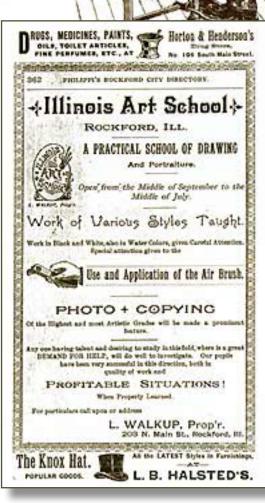




An art revolution begins . . .

Small classes were set up to teach people how to use this new art tool but demand would become so great that within three years the "Illinois Art School" would be formed to accommodate all the interested students.

As can be seen the Airbrush handbook was a comprehensive document full of woodcuts that depicted every aspect of its' use and detailed instructions as to how the best results could be achieved.





1885 - Photorealism began

By mid 1885 Airbrush production was in full swing and Liberty Walkup started marketing and selling his new and much refined single trigger design.

Phoebe Walkup had great success with an acclaimed portrait exhibition at the 1884 World Exposition in New Orleans and this had been an excellant spring board from which to publicise the Company.



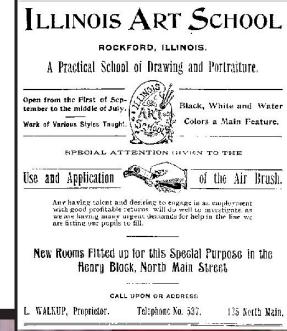


Development gathers pace . . .

To the left is a picture sketched in a few moments by company artist Will McEntee of author Mark Twain. Twain was so impressed he used the Airbrush to sign the sketch himself (though it seems he needed a couple of attempts).

To the right is an advertisement for the Art School set up in 1888 especially to teach airbrush techniques.

Below is a photograph of some of the developments that continued to be made on the original design. Most notably a jeweled windwheel mechanism that was far more robust than its predecessor.











Click on the below squares to open the movies



1. Loading ink and test spray (0.75mb)



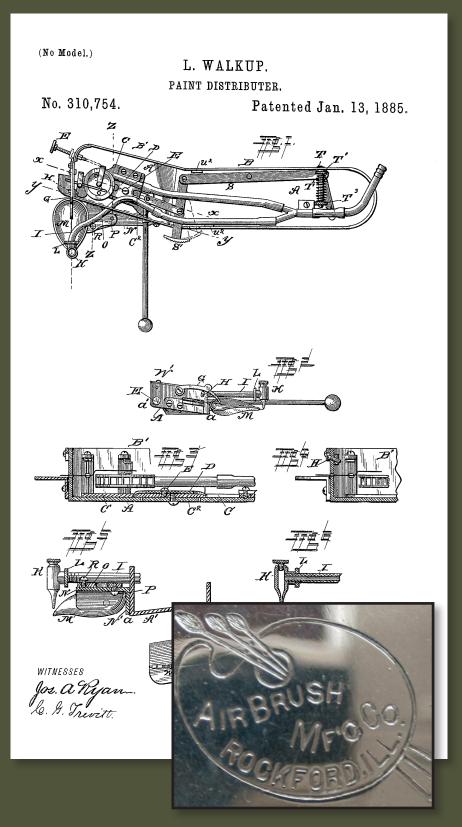
2. Starting to spray (0.85mb)



3. Distance and control (1mb)



4. Take a close look inside (1.6mb)



The Airbrush Manufacturing Company of Rockford, Illinois closed its doors in 1927.

But as one door closed, another opened. In fact, what was to come next changed everything – the "venturi" based airbrush.