EDITED BY **JOHN CASALE**, W2NI, 3 PICKERING LANE, TROY, NY 12180

The Forgotten Vibroplex Patent

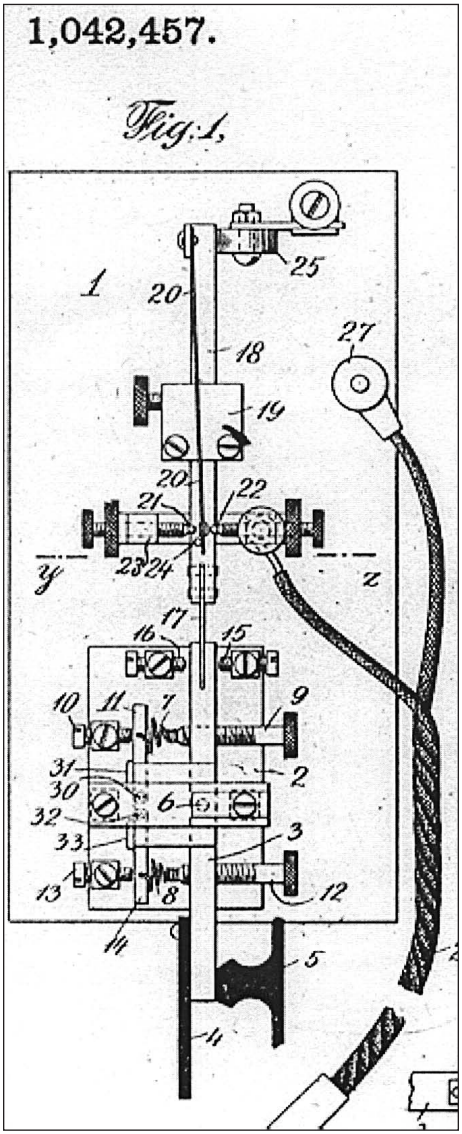
A Vibroplex bug that has never been seen before was recently discovered by Vibroplex collectors Randy Cole K6NW, and Martin Odenbach, DK4XL. No other collectors so far have claimed to have seen one, which could make this bug even rarer than the elusive Vibroplex Midget. The new find represents the fourth patent by Horace G. Martin (#1,042,457) filed on July 1, 1911, and was one of three bugs he invented while he was living in East Rutherford, New Jersey.

Up to now, it has been generally assumed that no production models were ever produced from the design. Considering this recent discovery, I thought it would be timely to document some history associated with this patent. There is significant information available about it because the patent was cited by the Vibroplex Company in a lawsuit that I briefly referred to in February's column.

The suit was titled "The Vibroplex Co. Inc. vs. J.H. Bunnell & Co. Inc. on Patent #1,042,457." One intent of the suit was to provide evidence that would dismiss the claims that the patent was only an experimental design and to confirm that a limited number were actually manufactured.First, some important background on what led up to this lawsuit and why Vibroplex had to resort to use this specific patent in court.

On December 23, 1923, The U.S. District Court for the Southern District of New York issued an injunction against J.H. Bunnell & Co., temporarily stopping them from manufacturing their "Gold Bug" transmitter. Bunnell was ordered to retrieve and dismantle the 24 Gold Bug models known to exist on that date. The injunction was issued based on the "Gold Bug's" infringement on Martin's patent #842,154 owned by the Vibroplex company. This patent represents Martin's "Original" bug design issued on January 22, 1907.

The injunction was issued with only one month remaining on the 17 year term of this patent. Vibroplex took advantage of this one month injunction period and saturated the trades



The drawing for patent #1,042,457.

with ads titled, "Another Victory for the Vibroplex." They also sent out fliers to their customers and dealers in all the major cities of the U.S., Canada, and Mexico proclaiming victory. Never once did they state, though, that this injunction was good for only one month.

This infuriated J.H.Bunnell & Co. After the injunction expired, Bunnell followed with ads telling customers that the Martin patent and injunction expired on January 22, 1924 and to ignore Vibroplex's claims. They also stated they had resumed their production of the "Gold Bug" transmitter. Vibroplex was later found to be still sending out these "Victory Fliers" as late as July of 1924.

Vibroplex's arsenal of effective fundamental patents with broad claims was significantly depleted with the expiration of Martin's "original" patent. But the firm was committed to stopping the competition from Bunnell and decided to try again in court. This time they dug deep into their vaults and pulled out a forgotten patent, # 1,042,457, that still had five years remaining on its term. Bunnell's opinion of this patent was simply, "Forgotten until now, but now resurrected in an attempt to extend the monopoly five years longer."

Vibroplex, relying on arguments surrounding the functions of the coil and vibrator springs, was able to tie up Bunnell in a lower court and appeal trial using this patent, but in the end, lost both cases.A glaringly different design feature of this bug was that it had the opposing dot and dash contacts on either side of the vibrator.

In Martin's "Original" patent he used a "two-piece, single lever" with a vibrator spring that only had one function, to create dots. In patent #1,042,457, he uses a "one-piece, single lever" with a vibrator spring that had two functions. One, to produce dots and secondly, to "restore the parts to normal" after making a dash.

Martin describe's the operation of this bug as follows: "This Machine has a single lever, a pair of contacts for making dots and another pair for making dashes. When the lever is pressed to the right the machine sends short impulses, or dots into the line; when pressed to the left, the lever flexes the main vibrating spring and permits the dash contacts to engage, holding the circuit closed for the length of time desired."

During the lower court case, Martin was called to the stand as a witness for Vibroplex. In this rare testimony, reproduced below, Martin documents the production of this bug. The exchange is between Martin and Murray Corrington. Corrington was the Vibroplex attorney who filed this patent in 1911.

NOVEMBER 12, 1925, NEW YORK

Corrington: "You are the inventor and patentee of the device set forth in the patent in suit No. 1,042,457?

Martin: "I am."

Corrington: "What is the device for, particularly?"

Martin: Transmitting dots and dashes over a telegraph line or radio."

Corrington: "For sending messages?"

Martin: "Yes."

Corrington: "Did you manufacture and put out and sell any of the machines shown in Exhibit No. 2?" (Exhibit No. 2 being a model of patent # 1,042,457)

Martin: "Yes."

Corrington: "About how many of those machines were put out in actual service?"

Martin: "I should say 100."

Corrington: "And what satisfaction did they give in practical operation?"

Martin: "They were all right. I never had any complaints on them."

Corrington: "And as far as you know are they still in use?"

Martin: "So far as I know they are still in use."

Corrington: "Do you have any interest whatever in the patent?"

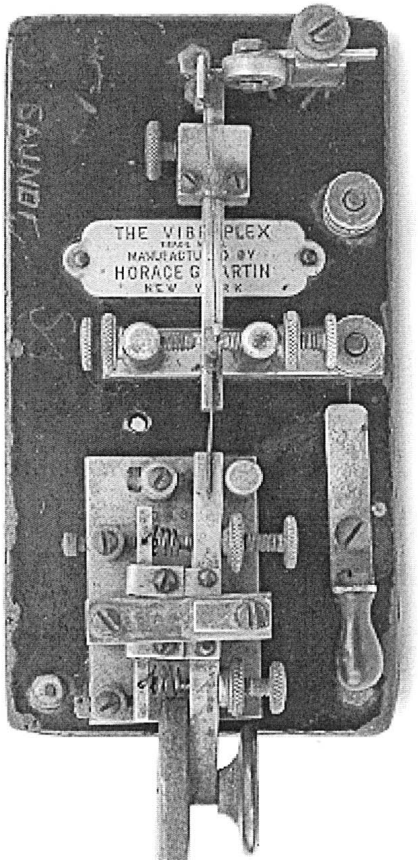
Martin: "None at all."

Corrington: "You have assigned all your interest in the patent to the Plaintiff (Vibroplex) company?"

Martin: "Yes, sir, I have."

Corrington admitted to being a novice when he filed this patent for Martin and stated he made a mistake in claiming that this bug is a single circuit device, meaning that there was one electrical circuit to produce both dots and dashes. This was disclosed when Martin was cross examined by Bunnell's attorney Philip Farnsworth. When Martin was asked to agree that his device used a single circuit to produce both dots and dashes Martin said: "No, Mr. Corrington did that. I do not agree with it." Martin's disagreement with Corrington worked against Vibroplex and helped Bunnell confirm the similarities of their "Gold Bug" to the dual circuit design of the expired "Original" patent. Bunnell questioned the validity of the patent itself over this disagreement.

There is an interesting sidenote about two of the exhibits used in the case. Vibroplex had Martin modify a stock #1,042,457 bug by moving the fixed dash contact next to the key lever to make it similar in operation to a "Gold Bug." He was also instructed to modified a stock "Gold Bug" by adding a fixed dash contact opposite the



The recently-discovered bug representing patent #1,042,457. Photo courtesy of Randy Cole, K6NW.

vibrator to make it look and operate as in the #1,042,457 design. Be on the look out for the possibility that one or both of these professionally modified bugs might turn up at some point.

Even though about 100 bugs were produced from the #1,042,457 design, according to Martin's statement in court, there does not appear to have been any kind of ad campaign to promote the model. Three months after he filed for that patent, on October 27, 1911, Martin filed for another patent that is recognized as covering his "Model-X," a true single-lever, single-circuit machine.

In November of 1911, J.E. Albright, who at that time was the sole selling agent, was advertising a "Single Lever Vibroplex." The ad stated that, "This new 1912 model will carry on wires where other sending machines have been ordered taken off." The ad showed the new "Model-X." One wonders if there was a 1911 model and if it was it possibly patent #1,042,457. Looking back to April of 1911, a bug called the "1911 Model" was indeed being advertised, but the ad shows a Martin Double-Lever bug.

Martin's motivation to go down this design path, according to Corrington, was that he was "working for a single circuit machine" and that he did not reach that point with patent #1,042,457. The low production number, he explained, was due to a decision made by Martin and "his associates" sometime in 1911 to focus on producing two machines, a "one-circuit" machine and a "two-circuit" machine.

The new "Model-X" was obviously their one circuit machine and they decided on patent # 842,154 (the "Original" bug design) over patent #1,042,457 to be their primary two circuit machine, "because there were thousands of them already in use and the operators were accustomed to them." After Vibroplex's loss in appeal, the firm still refused to give up and tried to stop Bunnell by using their "Bug" trademark. This final failed attempt was covered in February's column, "Technical and Legal History of the Bug Trademark."

There are many Vibroplex collectors out there who would like to document the existence of any other examples of this bug. If you have one, a good place to post this information is on the "MorseCode" reflector moderated by AWA member, Lynn Burlingame at http://www.qsl.net/n7cfo/. Several collectors from around the world, many of whom are AWA members, monitor this reflector and will be thrilled to hear from you.

SOURCES

National Archives and Records Administration, New York, N.Y.

U.S. Circuit Court of Appeals, Second Circuit, January, 1927

U.S. District Court for the Southern District of New York, May, 1926

The Vibroplex Co. Inc. vs. J.H.Bunnell & Co., on Patent 1,042,457, Files E29-72 / 9711

Journal of the Telegraph, April 20, November 20, 1911

U.S. Patent, 842,154, Horace G. Martin, January 22, 1907

U.S. Patent, 1,042,457, Horace G. Martin, October 29, 1912

U.S. Patent, 1,043,449, Horace G. Martin, November 5, 1912

U.S. Patent, 1,557,155, John J. Ghegan, October 13, 1925