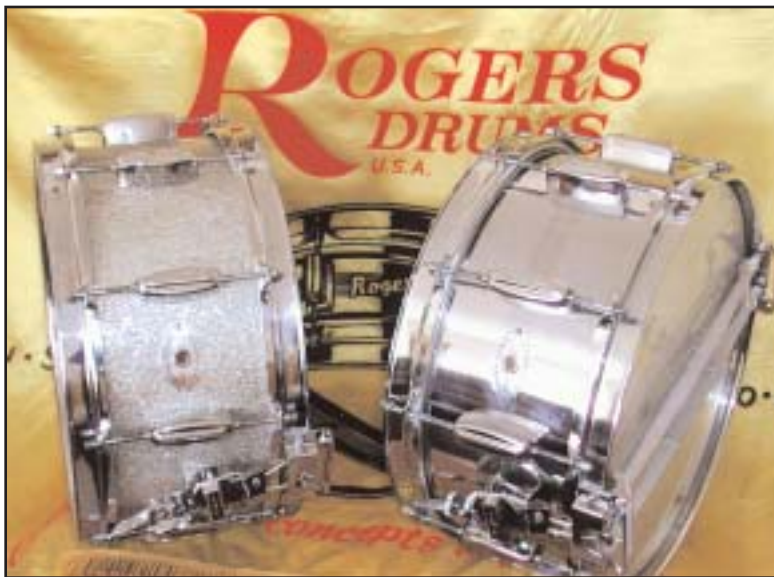


Making a Difference ...



Joe Thompson

the right man at
the right time...
for
ROGERS

by Charlie Costello

Every great drum company rises to prominence behind a major personality: Bill Ludwig and the Supra Phonic, Bud Slingerland and the Radio King. The rest of the list is long and colorful... As for Rogers, a company known originally for calfskin drumheads, the best candidate is not Henry Grossman. Sorry Henry, even though your ownership of Rogers lasted for 16 critical years from 1952 until 1967 and your financial support did allow Rogers to modernize. Nor was it his predecessor and company namesake Joseph Rogers and son Cleveland whose days since 1849 were mostly spent at the stockyards buying hides for drum heads while selling the instruments and hardware of other manufacturers. Interestingly to me, the individual that qualifies as Rogers' major personality was a modest, soft-spoken Ohio man named Josephus P. Thompson. At least he MIGHT qualify, if he was only better known. This article has some background on Joe and describes the inspiration that evolved into a passion for building drums.

From what I've learned, Joe was a very private man, once divorced, but happily remarried to Helen for 30 years and they had no children. He lived and worked his entire life in the town of Covington, Ohio with a population of only 2,603. He was extremely popular with Rogers employees, unfailingly loyal to his friends and rarely seen in public. Joe was also a brilliant inventor with a "flourishing mind" and a visionary product designer whose hobbies included antique restoration and instrument repairs for the local schools. But first and foremost throughout his life Joe was an enthusiastic musician. In 1939, many years before his association with Rogers he invented the flutophone, a school music-program standard and together with his associate Bitty Etter they were manufactured and sold for years. Eventually the flutophone was licensed to Trophy Music Products of Cleveland to keep up with the demand and is still sold worldwide by the thousands. In the late 50's Joe joined the Grossman Rogers team and his inventive talents were strongly

put to the test. It wasn't long before he became obsessed with perfecting the snare drum. Not surprisingly, he would soon list among his many successes another patented invention - the Dynasonic snare drum.

His design theory centered on the elimination of "snare beds", those hollowed out areas on the bottom of the shell. Beds allow the resonant bottom head to have deep and full contact with the snare wires yet they were a design defect that drove Joe crazy. He analyzed,... and studied,... and tested them - but through it all he always disagreed with the idea. Ultimately, he did everything necessary to completely eliminate them. His breakthrough came with the perfection of a free floating, self-supporting, radically different snare wire frame assembly, the independent horizontal-tensioning unit.

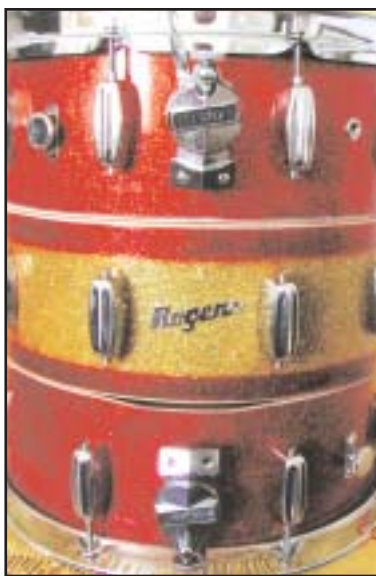


Joe Thompson (left) discussing his Dynasonic with an unidentified drummer at the Rogers factory in Covington in 1962.

Some background:

Buddy Rich was a Ludwig endorser in the fifties but became disenchanted with the company. Whatever his reasons, he was determined to find something new. The Buddy Rich/Rogers connection began at an industry show in the Metropoli Club in NYC. Many of the drum manufacturers were in attendance and Buddy talked to them all. To everyone's complete surprise he made the historic decision to go with the upstart, Rogers. Excited by the prospect and the opportunity it represented, Henry Grossman promised to make his company products the absolute top of the line. Four men met later that year at Joe's home. They were Joe, Ben Strauss-Rogers National Sales Director, Ellis Tolin - a major distributor for Rogers drums and owner of Drum City in Philadelphia, and of course Buddy, who laid out his personal theory on snare drum performance. Ben Strauss once gave me his recollection as a direct quote from Buddy who said: *"I need a snare drum that is musical - like any high quality instrument, but smooth and consistent across the entire dynamic range from pianissimo to triple forte"*. That one remark became the groups rallying cry. But the question on everyone's mind was "could Rogers make that kind of drum"?

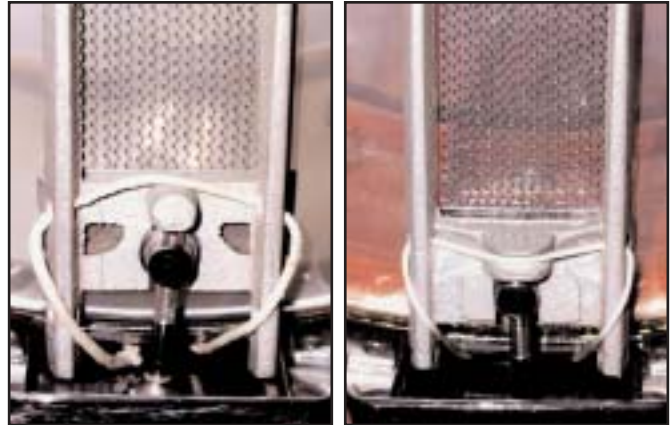
Ultimately, the task fell to Joe who was in charge of Grossman's engineering and realistically, was the secret for their success. He approached drum design the same way that he approached horns; all that mattered was the performance. Joe's passion was so great that Henry Grossman said in his eulogy, "the joy of his life was the fact that top musicians around the world were using his instruments". Joe's research led Rogers to use crisp 45-degree bearing edges on 100%



Two Dynasonics on top of a Powertone to illustrate the poor snare beds

maple shells, and numerous hardware improvements. But eventually the time came to improve the snare drum. During his analysis of current Rogers snares as well as those of his competitors, he found inconsistent and poorly assembled drums with glaringly weak metal parts. Worst of all, they had irregular snare beds typically cut with belt sanders - excessively deep and sloppy.

This had an enormously negative affect on the



Type 1 Dynasonic Frame 1961 Type 2 Dynasonic Frame 1964

sound and was especially noticeable at the lightest and hardest playing levels; exactly what Buddy was interested in improving. To view the extent of this problem in the old days at Rogers you only need to look at a pre-1962 Holiday snare, the predecessor to the Rogers Powertone. The drum has a bed so prominent, it literally cannot be tensioned flat with standard heads. Once Joe realized this fault he not only designed the Dynasonic to function without a snare bed, but he greatly improved Rogers other snare lines which featured the finest and most precise snare beds in the industry. This is another little known Rogers innovation that has been widely copied but infrequently credited to Joe Thompson.

Technically speaking:

Joe found that the bedded wires form a channel, which flatten and distort the bottom resonant head with dead spots and a loss of volume and tone quality. To him the best snare drum tone results from heads under equal tension. First the heads have to be in tune and melodically equal, only then can you add the snare sound. He visualized an air column moving off the batter head after the strike towards the resonant head. The force of the column moves the bottom head down to engage the snares. An instant later, the bouncing air column comes back up from the perfectly flat head towards the batter head. That concept assists stick rebound and improves the feel of playing a drum. Simply put, the more perfect the air column dynamics, the better the feel for the player. This was counter-intuitive to the snare drum designs of the day - wires in constant deep contact with the head in the snare bed while at the same time attempting to vibrate and reflecting the air column back up to the top. Granted, this may seem microscopic and almost insignificant to the majority of drummers, but Joe felt that at the highest professional levels of performance the improvement would be very perceptible.

continued on page 27

Making a Difference *continued ...*

The key difference is that the horizontal tensioning unit on a dynasonic has a single point of contact across the bottom of the head. All other snare drums have double points of contact, vertical contact when the snare set is pulled up into the bed and horizontal contact when the snares are stretched tight across the bottom. In the old design there was both air column disturbance and drumhead deflection with snare bed cutaways, a result that he saw as dissonant. Joe's idea was simple and logical but the problem of overcoming a snare bed is very hard to solve. The intention was for the drum to be similar to other harmonic instruments such as a bass violin. When a bass string is lightly touched, the freestanding shell of the instrument creates a tone in sympathy with the string. The floating frame was the harmonic equivalent of the bass strings as the heads, shell and snare assembly all engage in sympathetic resonance.

The entire design of snare beds is still, or at least should be a work in process. Did Joe Thompson have the right idea by

eliminating the snare bed? If so, then his idea of an independent horizontal tensioning system was a major step in the right direction but his solution falls short of the ideal. The dynasonic frame is rigid and while it does provide free support of the wires, it is itself capable of choking the snare drum with its limited vertical adjustment range and inflexibility. Joe's design was however a breakthrough in engineering analysis for 1960. Today we would be able to use computer models and simulation techniques, and I'm sure that as a perfectionist, Joe would have taken full advantage of the opportunity. Unfortunately he was on a budget, and Rogers as a business needed to start production. We do know that 50,000 dynasonic snare drums have all successfully used the same innovative design.

used by permission copyright 02/29/2002



What A Deal !

Todd Remy reports that \$185 bought this circa 1928 Ludwig 4" x 14" "Dance Model" Standard snare drum.



All maple drum shells
Lifetime Warranty

AHA Drum Repair Shop
Recovering
Re-edging
Restoration

250 John Morrow Parkway
Suite 101
Gainesville, Ga. 30501
770-503-1742

12th Annual International Custom and Vintage Drum Show

May 18 and 19, 2002 Kane County
Fairgrounds, St Charles, Illinois

Saturday 10 A.M. to 5 P.M.
Sunday 10:00 A.M. to 3 P.M.

Consignments Welcome!
Special Craviotto Drum Raffle!

Rob Cook
989-463-4757
rebeats@rebeats.com

DALLAS MUSIC CENTER

SONOR PREMIER
ZILDJIAN SABIAN
LP

Lessons / Books
Financing Available
770-443-3999

Dallas, Ga.