

# History of the Drum Set

The drum set is as American as baseball, hotdogs, and apple pie. The instrument as it currently exists has seen a great deal of evolution and development. From its infancy at the start of the 20<sup>th</sup> century to the innovations that are currently taking place, it has developed into the most visible and widely used instruments in the percussion family.

## Late 1800's

Brass bands were the most common type of instrumental ensemble in the United States in the later half of the 19<sup>th</sup> century. Every town in America had bandstands where concerts were held and perhaps the reason for their existence can be attributed in part to the Civil War. Every military unit had its own squad of musicians, usually formed according to locality. Occasionally some bands stayed together after the war, while others disbanded. Each brass band consisted of two or more drummers that played snare, bass, and cymbals. In addition to marching parade commitments, these bands sometimes moved "indoors" entertaining patrons in concert providing music for occasions such as picnics and town socials. When these groups moved inside, the standard instrumentation was cut down somewhat for practical reasons. Because of this, the need for two or more drummers decreased and resourceful inventions began to flourish.

The concept of one drummer playing two or more rhythms was made possible through the creation of the snare drum stand and bass drum pedal. Before the snare stand, drummers would hang the drum from their shoulder with a strap or sling, or position the drum on a chair. William F. Ludwig Sr., percussionist and founder of the Ludwig Drum Company developed and marketed the first bass drum pedal in 1909. Once these two practical inventions were available, a single drummer could do the work of two or more players. As a result, the drum set, or trap set (as it was known in the early part of the twenty century) was born!



*Ludwig 1909 Bass Drum Pedal (Courtesy of Stephen Joseph)*

This early sit down CON-TRAP-TION included a variety of percussion instruments including whistles, sand paper blocks, gongs, woodblocks, triangle, temple blocks, cowbells, and a goose neck style cymbal stand. By 1920, this set up became the standard.

## The 1920's

The roaring 20's saw the invention of the *low boy*. As its name implies, it stood approximately 12" high and when pressed down with the foot, the mechanism closed bringing two cymbals together. Early players credited for using the low boy include Warren Baby Dodds, Paul Barbarin, Ben Pollack, and Stan King. Before this innovation, drummers would accent the weak beats of two and four by choking or muting a suspended cymbal with their hand. Now this accent could be played with the left foot freeing up a players hands to perform syncopated rhythms. You can say this advancement helped create the four way independence texture that drummers use today.

The low boy was elevated twice during its development. It grew into the sock cymbal, (approximately 20" tall), and eventually the hi-hat as swing drummers like Chick Webb, Gene Krupa, Ray McKinley, and Jo Jones wanted the option of playing time on the cymbals with their hands.

## Evolution of the modern hi hat stand



*Low Boy (Courtesy of Winnie Mensink)*



*Sock Cymbal (Courtesy of Winnie Mensink)*



*Hi Hat (Courtesy of Winnie Mensink)*



*Ray McKinley selecting hi hat cymbals at the Zildjian Factory, Quincy Massachusetts (Courtesy of the Zildjian Company)*

Also in this decade, New Orleans drummers began experimenting with “fly swatters” which later became the wire brush creating connected, legato dance beats on the snare drum. The effect was produced by rotating the brush fan over the top of a calf skin drum head.

## 1930's



*Sonny Greer with Duke Ellington, circa 1930 (Courtesy of the Zildjian Company)*

Swing was king in the 1930's. The bands of Duke Ellington, Count Basie, and Benny Goodman helped Americans forget about their troubles throughout the decade of the Great Depression. This new sound began in 1923 when band leader Fletcher Henderson began composing and arranging original music for his ensemble. With space left for improvisation, the characteristics of his music consisted of tight harmonization, call and response between the brass and reeds, and the use of repeated riff figures played behind a soloist. Henderson's new ensemble combined improvisation found in the early New Orleans style, coupled with compositional aspects of piano ragtime music. These developments had an enormous effect on the drummer. When listening to music from this period, you will notice the change in the sound and feel. Beat patterns that were typically played on the snare drum and “effect” instruments such as wood blocks, temple blocks, and cow bells were consistently being played on the hi-hat cymbals. As the right hand played the swing pattern on the hi-hat, the left hand was free to accent on the snare drum in support of the arrangement and soloist.

The 1930's also saw the rise of drum superstar Gene Krupa. His energized playing with the Benny Goodman Orchestra helped to make him a drumming icon. Gene joined Goodman in 1934 and his influence affected all who followed, to include the type of equipment and drum sizes players used. He helped standardize the drum set up that jazz drummers still use today: 24 or 26" bass drum, 14" snare drum, 9X13 small tom mounted on the shell of the bass drum, and 16" floor tom. With the exception of the bass drum size, this set up is still in use by many big band drummers and is very economical in terms of physically moving around the instrument which made it easier for Gene to execute his drum solos. In addition to developing this all purpose drum set up; he helped develop tom toms that were tunable with a drum key on both sides. He also was responsible for the white marine pearl drum finish that many jazz drummers embraced including Buddy Rich. Before Krupa, all drum sets were covered with a black or white finish.

With the popularity of the 1937 Benny Goodman hit *Sing, Sing, Sing* (RCA), Krupa was one of the first jazz musicians to play extended solos to high critical acclaim.



*Gene Krupa and Buddy Rich with the all purpose drum set up (Courtesy of the Zildjian Company)*

## 1940-1960

In New York City throughout the 1940's and 50's, small groups of musicians including drummer Kenny Clarke and pianist Thelonious Monk began leading a movement where the bands purpose was to play music for listening rather than dancing which had been the norm throughout the 1930's and 40's. This new music termed *be-bop* featured complex harmony with melodies to fit, tricky poly-metric accents, and very fast tempos.

For swing drummers of the 1930's and 40's, the foundation and centerpiece of the time was the high hat and bass drum. For the new wave of be bop drummers, the focal point became the ride cymbal. The drum set up into this point in history was viewed as the main time keeper in the band. The drummer was the leader of the time and the rhythm section. Be-bop drummers utilized the drum set to change color and textures within an arrangement by playing fills and adding rhythmic comments. The time feel was also much lighter and the drum sizes were smaller. A typical be bop drum set consists of an 18" bass drum, 12" mounted tom, and a 14" large tom.

A very important innovation that took place in the mid 1950's that changed the sound and feel of the drum was the advent of the synthetic drum head. All recordings made before 1957 feature the sound of drums with calfskin heads. After Remo Beli invented the plastic head, most drummers switched due to the difficulty in keeping calf in tune. On a hot, humid day, the tuning of the drum would be lower because of the moist air affecting the heads. During the winter when it was dry, the heads would become very tight forcing the player to wet the heads in order to play on them. Calf tends to respond with a slower rebound with a stick and can feel softer and less abrasive than plastic. With calf, if the temperature and humidity are just right, you can get a *thud* sound from the bass drum that is unrivaled. Brushes also sound great when played on calf heads. The sounds of the wire as they sweep across the head feel different than plastic. The heads, if cared for, tend to last longer too.

The 1950's also saw new developments and improvements in hardware design. In 1959, Rogers Drum Company developed a tom holder with a ball and socket design called the *Swiv-O-Matic* permitting a player greater flexibility when positioning mounted toms on the bass drum.

The nylon tip drum stick was also invented in the late 1950's by Joe Calato. This advance helped a player increase their stick definition producing an articulate sound on a thinner, low pitched cymbal. Like plastic drum heads, some drummers switched to nylon tip sticks while others continued using wood on calf skin heads. Buddy Rich for example loved the sound and consistency of plastic heads but preferred the sound of wood tip sticks. Mel Lewis loved calf skin heads and used them on his snare drum and bass drum but favored nylon tip sticks on his thin K Zildjian Cymbals.



## The 1960's and beyond

Music of the 1960's increasingly grew louder which led to changes in the way drum equipment was manufactured. One major transformation was the weight of cymbals grew heavier and thicker to meet the demands of the more aggressive and electric music of the time. The Avedis Zildjian Company manufactured the *New Beat* Hi Hat pair in the early 60's consisting of a heavy bottom cymbal and a medium top. Hi hat cymbals up into that time were all made with a medium bottom and a thin top cymbal. Ride and crash cymbals were also made heavier to help penetrate through the amplification that bands were beginning to use. As the 60's came to a close, more and more drummers began using larger sets up that included 3 or more toms, double bass drums, and several crash cymbals.

In the 1970's, *concert toms* (toms without bottom heads) became extremely popular and were used for live performances as well as in the recording studio. The idea behind concert toms was due to the lack of the bottom head, the projection of the drum would increase. Drum shell construction also changed during this period when companies began adding plies to strengthen the shell in support of the added hardware weight. Three and four ply drums gave way to shells ranging from four to eight plies and also during this time, Ludwig began manufacturing *Acrylic* drum shells and one of the first players to popularize this new look and sound was John Bonham of Led Zeppelin. Japanese drum companies also began gaining strength in the American drum market throughout the 70's with advancements in hardware designs that included durable, heavy weight cymbal stands and tom holders. Most American companies could not compete at the outset with the price and quality of these new hardware designs and were forced to re-tool and build heavier hardware to compete with Japanese manufacturers.



*Ludwig 5 Piece Zep Set Acrylic Drum Kit (Courtesy of Conn-Selmer Inc.)*



The 70's also brought to the fore front a new system of adjusting the height of a stand with a stopping device called the *Memriloc* designed by Rogers Drum Company. Today, all drum companies have a memory lock system that comes equipped with each stand in your kit.

By 1980, *Power* size toms and bass drum shell depths were added to the myriad of drum choices that companies were offering by the adding an inch or more to the length of each shell. Also at this time, a suspension design called RIMS (Resonance Isolation Mounting System) was developed by former Air-Force Band Airmen of Note drummer Gary Gauger. The RIMS mounting system improved the resonance of tom toms due to the elimination of drilling into the shell.

Throughout the late 80's and 90's, custom drum makers began offering sizes and finishes not limited to those offered by the major drum companies. With custom drum making, a buyer could purchase a "shell pack" which consisted of a bass drum, snare drum, and tom toms that were "ready made" with bearing edges cut and holes drilled for each lug. The purchaser completed the construction on their own by determining color and choice of hardware.

Stay tuned throughout the 21st century for more advances in drum set technology and sound design...