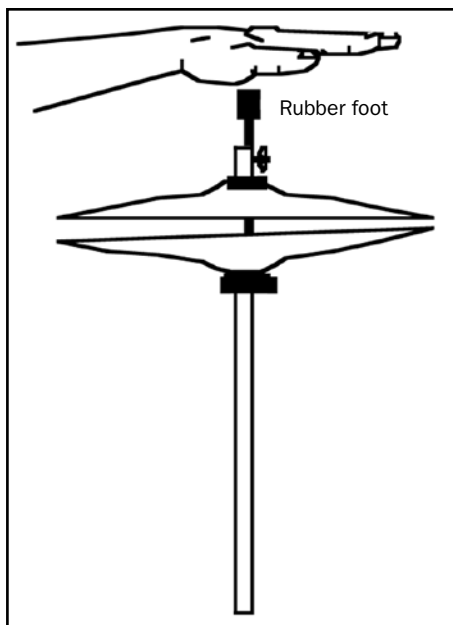


Cymbal Solutions

By J.B. Smith

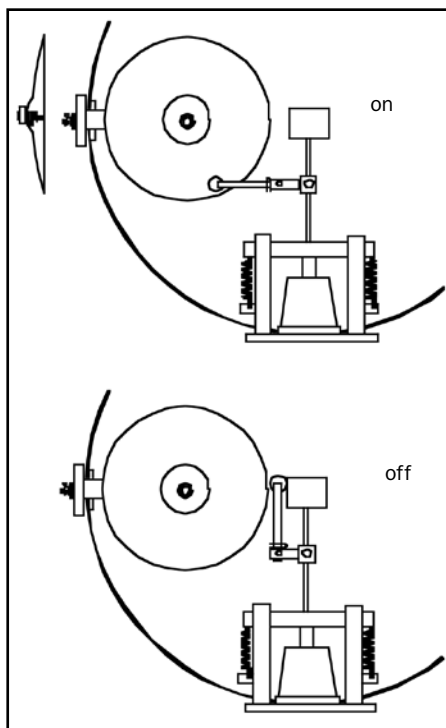
Composers' fondness for cymbals as an accent generator, color source, and rhythm instrument have led to the use of the instruments in a variety of musical settings. They do not, on occasion, take into account the performance issues that may arise from inclusion of cymbals in multiple-percussion setups. Percussionists have had to develop innovative techniques and build specialized hardware to accommodate the musical needs of some of our literature's most significant works.

Considered the first piece written for multiple percussionist, Igor Stravinsky's "L'histoire du soldat" greatly influenced subsequent writing for percussion. The crash cymbal passages present a dilemma for the player. In each case, the cymbals are preceded or followed by other instruments. William Kraft, with the blessing of the composer, used a foot-operated hi-hat stand and cymbals. Similarly, a hand-operated hi-hat stand can be used, allowing better control and the opportunity to use larger instruments. By pushing the center rod with the palm, the size of the stroke can be controlled and subtle dynamics can be executed. A single modification prevents the palm from being impaled: place a rubber foot (like those used on the legs of cymbal stands) on the top.



Darius Milhaud's "La Création du Monde" brought the drumset and its unique performance practice into mainstream

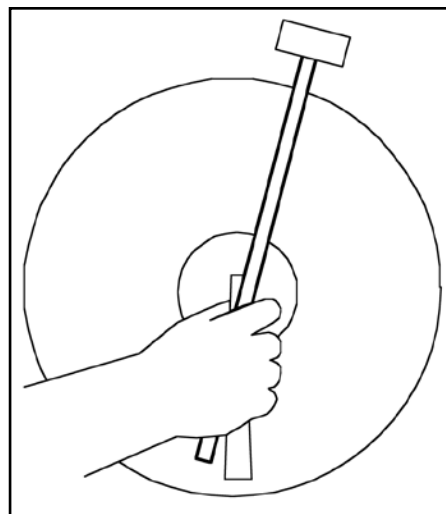
literature. Not uncommon at the time of its composition was a device that allowed the percussionist to play the bass drum and a single cymbal simultaneously. With the cymbal attached to the rim of the bass drum and a striker attached to the beater of a foot pedal, both instruments could be struck with one foot motion. The cymbal striker could also be retracted to allow the bass drum to be played alone.



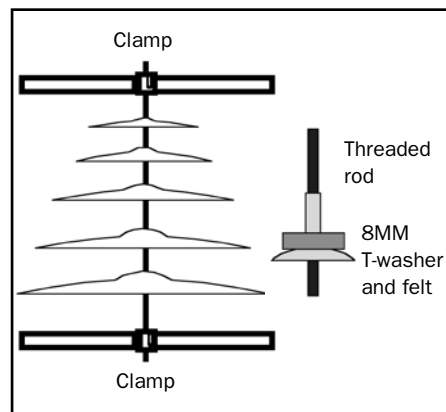
That device is rare today, so percussionists have to devise alternate solutions. A similar configuration can be created with (1) a hoop-mount bracket and double-L cymbal post, and (2) a large nut twisted into a coat-hanger wire loop drilled into the back of a plastic bass drum beater. To play the cymbal, the player simply bends the wire towards or away from the instrument. Another approach requires the use of a double bass drum pedal. The extended pedal is attached to an auxiliary bracket with a cymbal bolted to the post.

In Bela Bartok's "Sonata for Two Pianos and Percussion" the timpanist has to play crash cymbals in the third movement. In the coda, the player has plenty of time to get the cymbal pair in position. At measure 36, however, there is little time to pick them up and even less time to put them down. A padded table close by is a necessity. The player can also keep the mallets

in hand while executing the soft crashes to speed up the switch back and forth to the timpani.

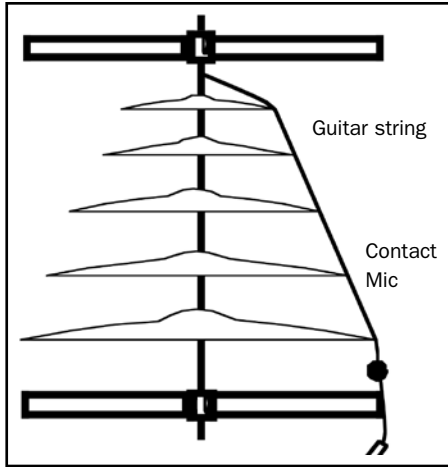


Some composers are especially enamored with cymbals. Scott Wyatt effectively uses ten cymbals in his solo for percussion and electronics, "Time Mark." Instead of using ten cymbal stands, I suggest assembling a rack configuration whereby stacks of five cymbals are mounted vertically. By using threaded rod, 8MM plastic T-washers, and felts, the cymbals can be securely mounted by clamps on the top and bottom of the rod. He also requires five of the cymbals to have sizzles. Sizzle cymbals can be special ordered, of course, but an alternative is to drape lengths of light chain or strings of paper clips over the cymbals to create a similar effect.

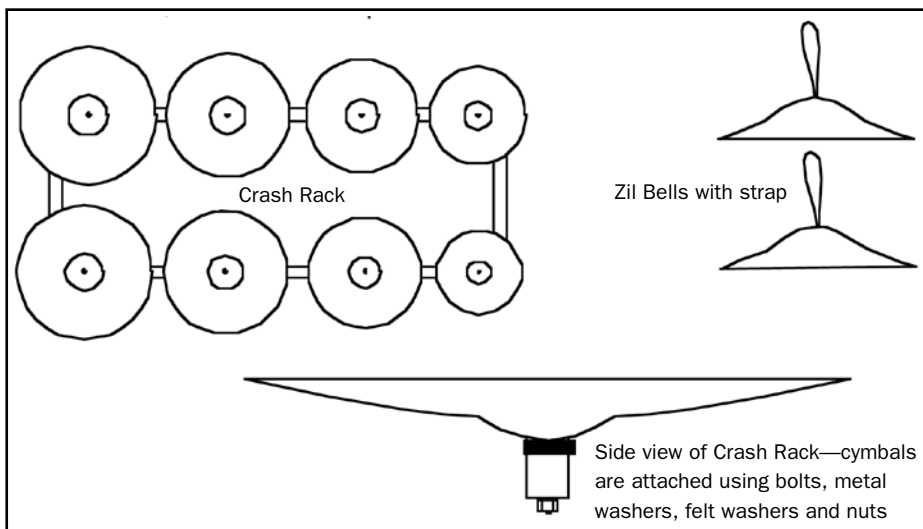


I used a similar arrangement in the fourth movement of Michael Daugherty's "UFO" for solo percussionist and wind band.

The movement is completely improvised. Instrument selection is left to the performer as well. I assembled an odd collection of instruments and mounted them into a rack cube. Additionally, all instruments were amplified (using a combination of contact and air mics) and processed using a mixer and laptop program (written in MAX/MSP). On the cymbal stack I laid a suspended guitar string on the edges of the cymbals and attached a contact mic to the end. The resultant grinding, scraping, scratching noises were otherworldly (appropriate since the performer is supposed to be an alien for the performance).

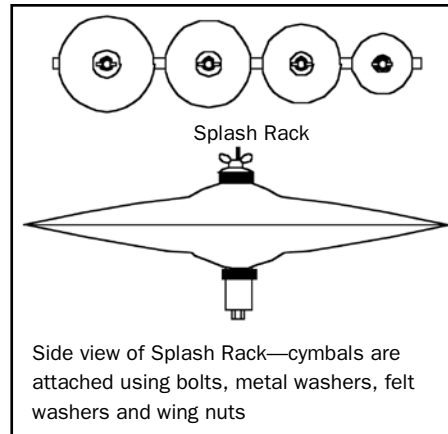


Multiple cymbals are also used in Wendy Mae Chambers' "Mandala in Funk" for solo percussion and percussion trio. In the third movement, "Mahakala," the soloist plays small crash cymbals. In consultation with the composer, it was decided that a rack of crash cymbals should be constructed to allow for a variety of colors and to create melodic contours and special effects. A friend welded the rack together and added removable legs. I used eight small cymbals (splash, EFX, Zil-Bels, etc.) in the rack and played on them with two different size Zil-Bels held in a traditional crash cymbal manner. In addition to various



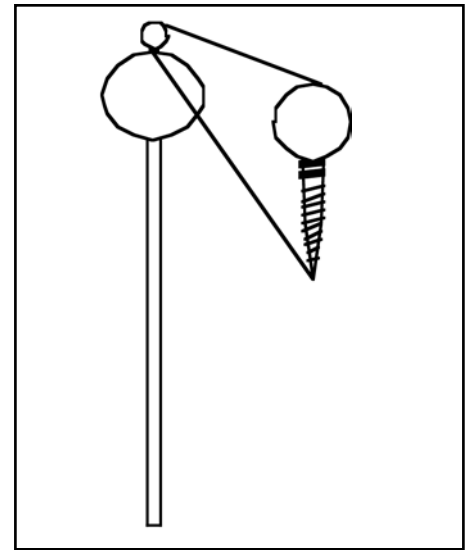
colors of crashes, sizzle effects, tremoli, and scrapes could be created.

I used the same approach in constructing a splash rack for my work for 13 percussionists, "All Things Hastened Back to Unity...." It can best be described as a set of four miniature closed hi-hat cymbal pairs played with sticks.



Performers often have to resort to compromises in selecting mallets when multiple instruments are used. Extreme examples are found in Toru Takemitsu's "Rain Tree" and Carl Vine's "Percussion Concerto." In "Rain Tree" the trio has to play crotales while executing four-mallet passages on the vibes and marimbas. In the Vine concerto, crotales notes are heard in the midst of marimba passages. Holding a fifth plastic or brass mallet is a cumbersome option. Another is to add a brass mallethead to the opposite end of a yarn mallet. A small threaded brass ball, left over from some lamp hardware, screwed onto a double-sided screw (hanger bolt) can be inserted into the end of the mallet. The player can then strike the crotales with an appropriate beater without complicating the marimba/vibraphone technique.

These examples illustrate the innovation and creativity required of contemporary percussionists. If you have seen or concocted



a solution to another cymbal dilemma, I'd be interested to hear about it. Contact me directly at J.B.Smith@asu.edu.

Dr. J.B. Smith is Professor of Music and the Coordinator of Percussion Studies in the School of Music at Arizona State University. He is internationally recognized as a performer, composer, educator, and conductor, having performed and recorded with such musicians as Steve Reich, Daniel Lentz, George Crumb, Chinary Ung, Sal Martirano, Chou Wen Chung, Lou Harrison, Morton Subotnick, Mary Ellen Childs, Arthur Weisberg, Alex Acuna, Robert Spring, John Bergamo, Len "Boogsie" Sharpe, Liam Teague, Robert Chappell, Brad Dutz, and Anthony Braxton. He is active as a composer, with numerous works published by C. Alan Publications. He has written articles for *The Instrumentalist*, *The Canadian Band Journal* and *Percussive Notes*, and served as president of the Arizona PAS chapter. PN