

ENGINE APPEARANCE – BEAUTY FOR THE BEAST

engine professional

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JANUARY-MARCH 2014



Internal Combustion Engines

Here for the long haul

Cat 3406E and C-15

Heads-up on the differences

In with the Old, Out with the New

Antique engine rebuilding

Lucky 113

Harley-Davidson 110
to 113 engine build



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248 SOUTH AVE

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*****AUTO**ALL FOR ADC 120 897 P1



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PSRST STD

DOHC 1650 TWIN TURBO,
COURTESY RICK MACKIE,
MERCURY RACING.

21st Century Fuel Delivery Science

I wanted to take some time to further explain damBEST patented advantages.

I am highlighting two patent numbers, 6851663B2 and 6211251.

Patent 6851663B2 is about our revolutionized venturi design — where the venturi is now above the discharge booster, rather than below the discharge booster, as in all other designs. Figure 15 shows old technology, booster above venturi. In this old standard design, the air can and does go around the booster, drawing no or less fuel. Changing the ratio between air going through the venturi and fuel being supplied by the booster. When hood scope pressure is added, the problem even gets worse. Figures 16 and 17 show simple examples of our Venturi above booster design. In this design “all” the air must go over the booster. Keeping air fuel ration linear all the time, no matter how much pressure you put above the venturi.

Patent 6211251 is about shearing and tumbling the fuel and air — and when it reaches proper speed inside the channel, the natural frequency of the air will further break up the droplets. Think about a steam of water going over just one waterfall, and how it will shear the stream into many droplets. Now put 20 waterfalls in a row, white water rafting

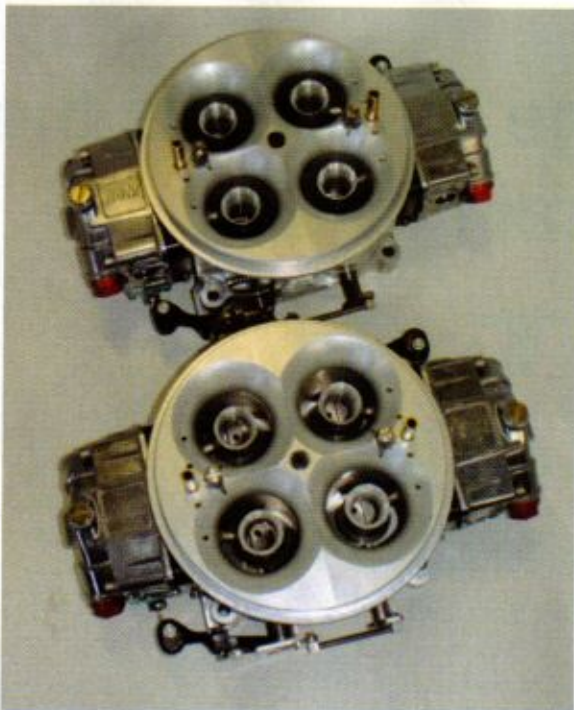


Figure 15 is old technology, booster above venturi. Figure 16 and 17 show simple examples of our venturi above booster design. In this design “all” the air must go over the booster. Keeping air fuel ration linear all the time, no matter how much pressure you put above the venturi.

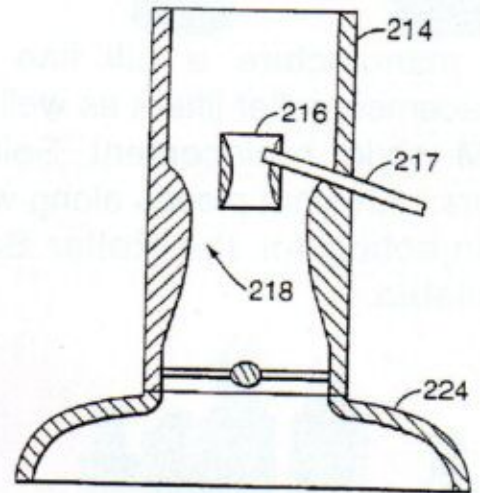


FIG. 15
PRIOR ART

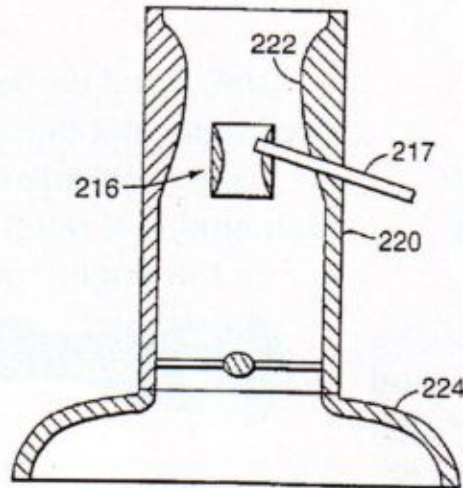


FIG. 16

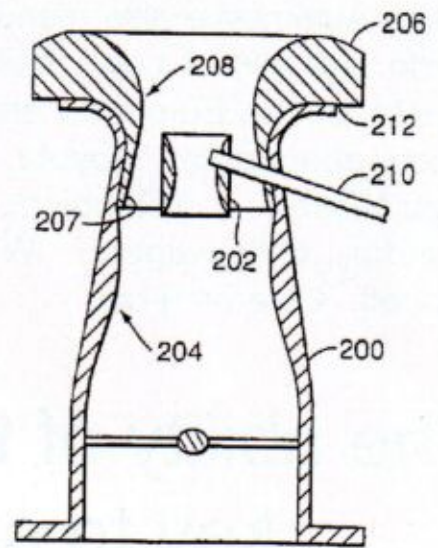


FIG. 17

Double your pleasure,
double your fun!!
These carbs, pictured
left, have patented
venturi and air foil
booster!



See John Satterfield's collection
of videos available at:
[YouTube.com/dambest1](https://www.youtube.com/dambest1)

SPEED READ

BY JOHN SATTERFIELD

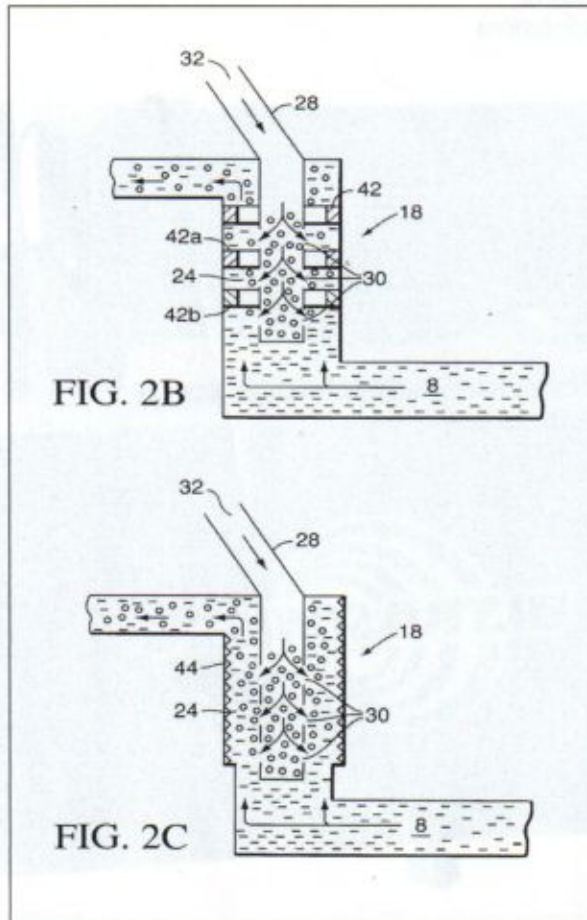
here we come! That is a rough idea on the slow speed affect.

The high speed affect is a little more aggressive. When the force across the channel is high enough to cause the air to reach it's natural frequency and vibrate, it too will break down the fuel droplets.

Figure 2C is what I am currently using because of its manufacture. The BIG GUN is figure 2B, cascading rings. Space and depth can be changed depending on fuel and time in channel. ■



John Satterfield became a highly successful engine builder during his years as a drag racer. He has made the science of efficient combustion techniques a consuming passion, which has resulted in his gaining a highly regarded reputation in all areas of racing. For more information, go online: www.damBEST.com.



Inside all damBEST Metering Blocks you will find their 251 Patent.

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