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ONCE UPON A TIME IN BUFFALO

The Birth of the "Automatics"

Fifty years ago, the end of World War II marked the beginning of the transformation of tenpin bowling into a global phenomenon.

A small maker of machinery for the manufacturing of tobacco products and baked goods with comfortable 1945 revenues of \$12 million annually, rushed into workable being two machines to set the pins and return the ball in time for the resumption of the American Bowling Congress tournament suspended during the war.

The little company known as American Machine & Foundry Company put together two electro-mechanical devices and headed for the 44th ABC Tournament in Buffalo. Unable to gain entry in the tournament building - the brownstone 74th Regiment Armory - it rented the rear of a garage across the street at the corner of Connecticut and Prospect and converted it into an exhibition hall.

Dubbed the AMF Automatic Pinspotter, the two machines, installed at the pit end of two regulation length alley-beds, were nine feet tall, weighed two-tons each, and operated noisily thanks to some 6,000 parts.

For the next six weeks, more than 50,000 braved the snow and ice of this industrial city to view these marvels in action.

The Dr. Frankenstein of this monster was a Pearl River, N.Y. technician Gottfried Schmidt, a design engineer with the Dexter Folder Company in this Rockland County village. Schmidt was a 130 - average bowler, a regular customer at a small bowling center operated by George Beckerle, a former auto sales dealer and repair mechanic.

George had a constant pinboy shortage problem and thought there must be a better way - automation. He was particularly impressed with the work of Dexter Folder across from his establishment, especially its use of suction to lift paper for the presses and folding machines.

Schmidt agreed to help. A Dexter draftsman, John McElroy, was enlisted to make a set of blueprints. Still, a good machinist was needed so another Dexter employee, Fred Sandhage, joined up to make and assemble parts. An empty turkey house on Sandhage's Pearl River farm served as the development center.

Four years later the Pearl River foursome regarded their creation ready for the market so Gottfried, now plain Fred, was elected to find a corporate Sugar Daddy. He went, of course, to Brunswick which for more than 100 years had dominated the bowling equipment business.

Robert E. "Bob" Kennedy was in charge of Brunswick's New York division. Kennedy had been with the company since 1911 and besides being a salesman's salesman, was the father of such marketing-hyping creations as the Red Crown pin and the Rangefinder, both still in the line.

The idea of a machine to set the pins and return the ball was not new at Brunswick. For years the company had an inventor, Ernest Hedenskoog trying unsuccessfully to create such a robot.

Kennedy visited the Pearl River turkey house and immediately told the Brunswick Chicago home office about this inspiring invention, but there as no interest. In 1937, Kennedy had left Brunswick for a small competitor - American Bowling and Billiard. What he had seen in Pearl River still intrigued him so he looked up Fred Schmidt again to find no progress in Schmidt's search for a sponsor whereupon Kennedy formed Bowling Products Management with him, Schmidt and a lawyer S. F. Hartman as principals.

Hartman said the best machinery company in the U. S. was a small organization called American Machine & Foundry Company whereupon Kennedy contacted its president - later chairman - Morehead Patterson.

Patterson in later years said the arrival of Kennedy and Fred Schmidt couldn't have been more propitious. While possessed of a good backlog for their cigarette making and packing machinery, he saw this at an end in a few years and had been seeking a new device that would both satisfy a previously unmechanized business, but also could be leased. The Jewel in the company's crown was a cigar machine producing steady profits on a leasing arrangement.

He visited the Pearl River turkey house, promptly took Schmidt and Kennedy into the company while acquiring Bowling Products Management and all of its patents. There was still a lot of refinement required which continued while the company concentrated on production of military equipment during World War II.

With the end of the war in late 1945, it resumed production of its proprietary lines, established a subsidiary AMF Pinspotters Inc. with Kennedy as its Vice President, and zeroed in on upstate Buffalo for the March American Bowling Congress Tournament.

Kennedy proceeded to raid Brunswick of its crack salesman. Patterson arranged to issue \$8 million of preferred stock to finance what everyone knew would be an expensive marketing and development program. A huge plant on Buffalo's outskirts built during the war for military equipment production was acquired from the Reconstruction Finance Corporation for 10 cents on the dollar. A public relations department was established with the writer of this article as its first-ever publicity manager.

Media, strictly print and newsreels in those pre-television days, was informed on all fronts of the coming of this revolutionary wonder. Press syndicates climbed aboard including a full-page pictorial layout by King Features and features by Scripps-Howard's NEA. Spreads occurred in Popular Mechanics and Popular Science. The Wall Street Journal paid attention and even Life Magazine gave the machine a full page. AMF stock promptly went from 21 to 45.

The ABC had long given exclusive display rights inside its tournament hall to Brunswick, in return for favorable alley-bed installation charges. Never one to be outdone, Kennedy made a deal with the owner of a big garage across the way from the 74th Regiment Armory housing the tourney to convert the rear area into a Pinspotter demonstration site. Frank Downey was sent to Buffalo to put it all together. A St. Joseph, Mo. native, Downey had been an associate of Patterson when the latter was in Washington during the war as assistant to the rubber director of the War Production Board. Patterson brought him into the company as a presidential assistant. When Frank moved to his new home on Long Island his car had the original synthetic rubber tire that had been on display in Washington.

A huge billboard trumpeting the presence of the Pinspotter was installed on the roof of the garage facing the ABC Tournament entrance across the street. Underneath, the rear of the garage was transformed with the installation of two regulation-length alley beds just inside the doors set off by a water-pipe barrier for spectators and the garage itself concealed by floor-to-ceiling drapes. Two nine-foot high machines were installed at the pit, appropriately labeled with a concealing banner "The AMF Automatic Pinspotter".

Back in New York, space had been taken in the Cotton Exchange Building at 60 Beaver Street for the new Pinspotters Division staff under the direction of Vice President Bob Kennedy.

All was in place and ready to go with the opening of the ABC Tournament on March 16, 1946. Just inside of the 74th Regiment Armory was Brunswick's obligatory hospitality section replete with new bowling balls, drilling equipment and star bowler Joe Norris, noted practical joker including the hot foot.

Brunswick's array of alley beds, busy with bowlers, dominated the hall. Scorers were at the approaches connected to a host of men at the pit end with score information while underneath pinboys worked away.

Halfway up the bleacher's was the "Press Box" with one occupant, Mort Luby, covering daily for the Associated Press as his son after him, filing hometown press requests, smoking one English Oval after the other, and dripping with perspiration. It was hot in that hall. He was there for the duration, calling it a night after the day's play ended and repairing to a Chinese Restaurant.

Across the way, action at the Pinspotter exhibition began with the opening of the ABC show and daily the curious spilled out on the street in the ice and cold waiting their turn to see what modern technology had brought.

Once inside they witnessed the machines in full operation, one at a time. Jimmy Hughes, a Buffalo bowler and technician at the company's new Buffalo plant, provided the bowling. Their feet clothed in slippers, moonlighting local radio announcers described the machine's operations as they occurred. They had been trained to switch quickly to the companion Pinspotter if there was trouble.

A team of technicians worked skillfully to maintain operations of one machine or the other. A mass of bicycle chains, cams, motors, suction pumps and assorted other parts comprised these monsters. The lives of those technicians hidden in the rear from public view made Santa's workshop a funeral parlor.

What was known as a "Pindicator" kept viewers informed. A relatively small overhead triangular box, it presented the full array of pins, lighting up to indicate first ball, second ball, strike, spare, foul, pins left standing after the first ball.

At the top of the machine behind the masking unit was a control box jammed with electrical relays. The Pinspotter operated electro-mechanically.

Sequentially, its routine began when the first ball landed on a two-bar "cradle" in the pit, setting all operations in motion. When activated, the machine lowered two sweeper bars, the outer one to protect against "double-balling", the other inside to push felled pins into the pit after standing pins had been sucked out of the way by a descending table's spotting cups that looked like inverted funnels.

The second set of pins, held in a loading station above, was moved forward by its clamped butts and placed in the upside of the spotting table. Meanwhile, the ball had been lifted by the tilted pit cradle, rolled through a kickback door and sent back to the bowler.

Deadwood was swept into a hopper in the pit where it was lifted in the manner of a full apron and noisily dumped behind the pit cushion where the pins were delivered on a clamp-fitted twin chain elevator, upside down, to the loading station.

In the event a strike, foul or the second ball and a new setup was needed, the spotting table flipped a full 180 degrees and lowered a full set to the alley bed, then elevated itself and turned over into its original position. Cycling in a strike or two-ball frame took 17 seconds.

The ABC's new equipment committee approved the Pinspotter in April.

Kennedy had sent his crack sales force to Buffalo to deal with visiting proprietors who liked what they saw enough to contract for 10,000 machines with \$1,000 down on each one. The Pinspotter was marketed on a rental basis much in the manner of AMF's cash-cow cigar machine.

All the news film crews braved the celebrated Buffalo winter to make their annual shooting of ABC Tournament play. This year the new attraction across the street drew their immediate attention. Moviegoers from New York to San Francisco soon saw for the first time this

unprecedented invention in action. Paramount News coverage was especially eye filling thanks to the resourcefulness of cameraman big Lou Hutt, who fitted his camera to a dolly then, barefooted, pushed it down the alley behind a bowling ball.

Those two months of daily demonstrations had made it very apparent to AMF that there was still a lot of work to be done before line Pinspotter production could be undertaken.

But just before moving out of the Buffalo garage and back to the new plant, Columbia Pictures came in to produce a short "Tenpin Magic" with sportscaster Bill Stern. Starring the Pinspotter, the short film had as supporting cast, Rahway, N.J. tailor Marty Cassio, then holder of the ABC's 10-year high average; Tony Sparando, Woodside, Long Island, 1946 New City All Events Champion and winner of the Petersen Classic, and Wal Mikiel of Detroit, 1946 National Women's Singles Champion.

The company moved its two battered "Model As" back to the vast new Buffalo plant. In the fall, two mechanical pinsetting devices were acquired - the "Olentangy" project of the L.I. Le Veque Company of Columbus, Ohio, and the Automatic Pinsetter, "the Clark machine", of Camden, N.J. Several features of both were incorporated in AMF's redesign program.

All told, it took five complete redesigns and some \$15 million dollars of development money six more years before the company went into line production with 16 AMF automatic pinspotters across Ollie Holmes' Farragut Pool Center in Brooklyn in August, 1952. Not long thereafter AMF became a "full service" bowling equipment manufacturer with the million dollar purchase of National Bowling and Billiard.

In August, 1962, Morehead Patterson died. By then thanks to his vision and dogged perseverance, bowling with the Pinspotter in centers fully AMF equipped was off and running from Japan and Australia to Eastern Europe. Still on the wall of his office, the company boardroom, was a framed simulated blueprint, designed in 1946 by a Buffalo draftsman, entitled "Final production model - the AMF Automatic Pinspotter", illustrated by a drawing of a small, tattered African - American.

Raymond R. (Woody) Woodruff joined AMF after service in the Navy in 1946. He became involved in a project that has had the most dramatic effect on the game of Bowling.

As an integral member of the engineering and installation team, he was involved in its public introduction in 1946 to its first commercial installation in Mt. Clemens, Michigan in August of 1951.

In 1957 he personally supervised the first major event to become completely automated, the ABC tournament in Fort Worth, Texas on 1957. The 1959 All Star in Minneapolis and the 1960 All-Star in Chicago were to follow.

During his tenure at AMF, Woodruff has served as Service Supervisor, Installation and Field Operations Supervisor. He also served as Assistant to the Vice President-Customer Relations, Regional Sales Manager, Vice President Sales, Vice President Marketing and Assistant Group Executive.

He retired in 1984 but continued as a Consultant. In 1987 he continued in that role when the company moved its Headquarters to Richmond, Va.

Woodruff also served on the board of the National Bowling Council and served as its President in 1973 - 1974 and 1978 - 1979. He has also been named an Honorary Lifetime member of the PBA in 1979. Woodruff has been on the Board of the National Bowling Hall of Fame since it was formed. He also served as President for two terms.

Other awards:

- BBIA Industry Service Award - 1984
- Illinois State BPA Award of Gratitude - 1984
- Honorary Member Bowling Writers Association of America, 1984
- New York City Bowling Council Distinguished Service Award.
- Rip Van Winkle Award - 1986
- John Gavie Award - 1990
- Bowling Centers of Michigan Award - 1989

Woodruff and his wife Arkene reside in Plandome Manor, N.Y.