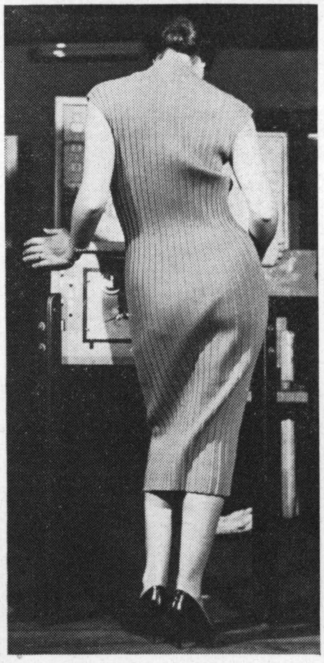
UNGUNCHABLE HARRY, KING OF THE PINS

The American pinball machine might still look like bagatelle if a genius named Harry Williams hadn't come along to add blinking lights, jangling bells—and an incorruptible little gadget called TILT

BY J. P. CAHN



GUNCHING, in pinball jargon, is application of body English to the machine for the purpose of influencing the roll of the ball—and in certain pleasant cases, for the entertainment of the gallery.

With the possible exception of women, the modern pinball game is unquestionably the most complex snare ever devised to induce a man to part with his loose change in return for a little light, relaxing entertainment.

Under a heady torrent of nickels and dimes, the once simple pin game has blossomed into something that looks like a cross between a Minsky marquee and Univac. Lurking behind its gaudy lights and computing circuits is the peculiar genius of a soft-spoken little man in his early fifties. His name is Harry Williams. He is generally regarded as the Thomas Edison of the pinball game. Just about every feature of a modern pin machine sprang from his inventive brain: first, he electrified it; then he licked cheating with the famed "TILT" mechanism; next he made it possible for pinball machines to "pay off" in free games. Without these developments the pinball industry would still be in the dark ages.

As a result of his efforts, Harry Williams is now a confident, two- [*Continued on page* 71]

Photographed for TRUE by HOMER PAGE

Williams' big Chicago manufacturing plant turns out a blinking, bell-ringing array of pin games—a happy contrast to the old days when he hand built one machine at a time, groping for a winner.

the lodge buildings look like black humps against a lighter sky when we take off again at 2:30 in the morning. Chuck is still sleepy-eyed as the spray drops off under the floats and we head back toward the peaks. The weather forecast stinks, so Erwin is coming in early tomorrow to Glacier Lake and will meet us partway back. We figure on one day in and maybe partway back out, then we'll siwash out again and return to Glacier Lake in the early morning.

It's a race as Jim, Lloyd and I take turns in the lead, seeing who can set the fastest pace. I feel much stronger, and knowing that the prize is just over three mountains pulls like home to a sled dog. We seem to rise up the steep terrain almost effortlessly, covering the distance to the final peak in fantastic time. I make a speech about my dependable second wind and astute mountaineering when Lloyd reminds me that now that I'm no longer appalled by the route, I'm climbing upright, in balanced stride. Even the perpendicular peak ahead looks not so tough until we're crossing an ice field near the top.

Suddenly Jim's footing gives way and he's gone 50 feet down before I can turn in answer to his cry. We watch in horror, knowing we can do nothing, until his gloved fingers somehow grasp a handhold. He stays perfectly still for a full minute, spread out on the ice, studying his precarious position before he attempts a move; then looking up he yells,

"Just like downtown!"

We know he's got a way out figured, so we start to breathe again as he finds a toehold, then a handhold up above, and inches his way back to our grasping hands.

Just how we scrambled over the crest and down to the ram I'll never know, but the closer we get the faster we go. There is one question uppermost in my mind: *Can the horns have withstood that shattering fall?*

The ram has caromed some 200 yards in a series of 20- and 30-foot drop-offs. As we approach the last few yards, we all go more and more slowly, afraid to look. Lloyd spots a bright patch on one horn.

"He's probably ruined. That looks like a break."

I cling to the consoling memory of Bert and Chris Klineburger, at Jonas Brothers, banging sheep horns on the cement floor in an effort to break the horns loose for mounting. Broken or not, the head is tremendous. The horns are badly broomed, tight curled and massive beyond belief. I wondered how this fellow could hold his head up in that typical proud stance.

I reach for my tape, turning all my pockets out. Damn! I've left it in camp. We look at the bright nick in the horn and discover it's from a rifle bullet! Now we can figure out what happened. As the rams crossed the ravine in the fog, one of my high shots hit the edge of the top curl, stopping my ram with its terrific impact for a few moments. That's when the younger ram took over the lead. Shaking off the stunning effect, the big boy leaped back into his lead position a few moments later.

As best we can guess, the horn is 42¾ inches, with about six inches broomed on either side. By our count of yearly growth rings, the ram is 13 years old, a centenarian of the mountains. One bad misfortune—the meat is spoiled. Right then I resolve never to shoot at another animal unless I can get at him right away. I never have before, and I never will again.

We remove cape and horns and start down off the mountain, moving along quickly in the gathering dusk. At the first dead wood we find, we build a fire and settle for a dry night's sleep. By 4 in the morning the long northern day has started and we're well on our way. The sun is directly overhead when we top the last peak of the maelstrom and look down the long valley to the glacier. Miles away we can see the icebergs of Glacier Lake floating in their blue bowl of water. We're off the last mountain when Erwin meets us, toting an oversize Thermos of hot coffee.

We rehash the whole hunt right there. He's got the tape that I forgot. We measure off carefully and find that the horns are 42½ and 43, totaling as near as we can figure 172 points. That puts the ram well up in the records.

"Where was he hit?" Erwin asks.

I show him the improbable, incredible, unbelievable hole in the cape—right between the eyes. Erwin gapes.

"How far was it?"

That one I don't answer. I can only make a guess, and that guess I'll never tell. No rifle can shoot accurately at that distance. No one would believe me. All I know is that the ram's luck had run out.—**William A. Fisher**

ATTENTION HUNTERS

Here are the new season dates for Alaskan sheep: Aug. 15-Sept. 20 in northern areas, Aug. 20-31 on Kenai Peninsula, Aug. 20-Sept. 20 in remaining areas. Nonresident hunting license costs $10, sheep tag, $50.

For list of registered guides, information on equipment, clothing and airlines, write Travel Editor, TRUE Magazine, 67 West 44th Street, New York 36, N.Y.

Ungunchable Harry, King of the Pins

[*Continued from page* 55]

Thunderbird man who flys his own Beechcraft between his home in Pacific Palisades, a plush-plated suburb of Los Angeles, and his Chicago office—an executive extravaganza with thick, red, wall-to-wall carpeting, an ebony and white wall-to-wall desk and a matching wall-to-wall white leather sofa.

Looking at Williams' layout today, it's hard to believe that in 1932 he was scuffling around Southern California with no idea where the next day's lunch money was coming from. He had gone to Hollywood to produce quickie commercial movies—and everything was dandy until October of 1929. Then came the Crash.

Williams, a downy-jawed 23-year-old with a brand new wife to support, hit the bricks looking for work. He spotted a want-ad that offered a nebulous proposition to "men interested in making $2 an hour." When he answered it he found himself ogling the first coin-operated game he had ever seen—a cumbersome affair called Jai Alai in which the player, working controls, tried to flip a cork ball into a basket.

"Sales films?" the Jai Alai salesman gasped incredibly. "Why we don't need any sales films. This game is such a money maker it sells itself—here, let me show you." The salesman handed Williams a handful of coins. "Get the feel of it yourself."

While Williams was studiously trying to master the technique of flipping the ball into the basket the salesman sidled up and went into his pitch.

"The beautiful part about Jai Alai," he crooned, "is that the game does all the work. You just set this game out in a drug store or soda fountain and let it coin money for you. Why, Jai Alai draws such big crowds some of those store owners will pay you a little something on account of the customers this game brings in. They pay the heat, the light and the rent in the store; you just drop around when you feel like it and collect the profits. Jai Alai is just like having a trap line that catches money."

Peering dreamily through a golden haze, Williams murmured that he might just as well take the franchise for the entire Los Angeles area.

"You are," purred the salesman, "a man of foresight, Mr. Williams. I can let you have all of Los Angeles for just $17,000—cash."

Williams settled for five games at $100 each, a transaction that very nicely took care of his entire capital.

That was the end of Harry Williams, motion picture producer. As a matter of fact, it was almost the end of Harry Williams.

Instead of paying Williams to have his Jai Alai games on the premises, store owners demanded a flat 50 percent of his take in exchange for letting him set up a game. And it wasn't easy to find good locations either. The best spots had already been snapped up by other eager game operators.

Williams put his first Jai Alai game in a soda fountain run by a lean, thin lipped refugee from the cider press and cracker barrel belt. When the game had been working for two or three days, Williams dashed back to see what it had taken in.

Bustling into the store, Williams beamed at the stony faced proprietor, whipped out his key in a business-like manner and opened the cash box.

It contained seven lonely nickels and a slug.

"If you don't get these signs changed, Mr. McIntyre, we quit!"

"What's the matter with this game?" Williams asked the man behind the fountain.

"Dunno," he snapped. "Guess folks don't have money to fritter away trying to put a little ball in a basket. I'll take my half now, sonny."

Williams handed him all seven nickels, pocketed the slug and walked glumly out of the store. He suddenly realized he had been sold—but good. Instead of earning him $2 an hour, Jai Alai did well to earn $2 a day—half of which went to the locations. At that rate, Williams figured it would be a mighty long haul before he got his investment back to say nothing of making any profit.

But there wasn't any out. Williams doggedly kept on making his rounds, collecting the pittance that barely kept a roof over his head and keeping his games in repair as best he could. Rough as it was, the longer Williams plugged around his route, the more certain he felt there was a great future in a game that would give a man a chance to forget his worries and have a little fun for just a few cents. The trick, he reasoned, was to find the right kind of game.

One morning Williams was in a drug store working on a particularly balky Jai Alai when the druggist rushed over. "Harry," he shouted, "I've just seen the damndest contraption! A coin operated baseball game! In the drug store across from Hollywood high. And they're lined up just waiting for a chance to play it!"

Williams established some kind of record getting over there.

It was true. Standing stiff-legged against a wall was a hulking cabinet that housed a miniature baseball diamond complete with little metal ball players. Half a dozen men were lined up impatiently waiting to try to make the little cast-iron batter belt the cast-iron pitcher out of the box.

That was all it took to fire up Williams' smoldering faith in coin-operated games. But when he tracked down the agent for the All American Baseball Game, the flame sputtered and almost went out. The games cost $600 apiece.

With every cent he had tied up in Jai Alai, Williams still managed to wrangle the agent into letting him take 10 games on credit.

Harry Williams was no sooner out on the end of a $6,000 limb when Wiffle Board, the generally accepted granddaddy of the pinball game, came roaring out of Youngstown, Ohio, and sawed it off behind him.

Williams saw his first Wiffle Board in a lunch counter opposite Universal Studios in Hollywood. Beautifully made, it was still little more than a sloping board with nails stuck in it. But it wasn't the looks of the game that concerned Williams—it was the fact that the lunch counter was jammed to the doors with grown men, all waiting to dump their change into Wiffle Board.

That night, Williams told his wife Geneva about the new game. "I can't believe it," he said. "I can't get it through my head that grown men will pour their money in a silly looking thing like that."

But more and more Wiffle Boards began popping up and Williams knew that the kind of game he *thought* he had in All American Baseball had finally come along.

Soon, men all over the country were lining up to play Wiffle Board. But the only men Harry Williams saw lining up were his creditors. He struggled along with All American as long as he could. Then one night he announced, "Geneva, we're going into the game manufacturing business. These pin games are the coming things and they're so simple a kid could make them."

Operating in a little rented rookery, he would slap a game together at night and next day haul it out to a drug store or smoke shop to see if it caught on with the players. But harried by creditors and beleagured daily by the problem of raising eating money, Williams couldn't come up with a design that clicked.

It gives you a good feeling to hear him tell about it today; a quick moving little man in a yellow cashmere sweater lounging back in that plush office, his handsome, handwrought, solid gold finger ring gleaming in the subdued light.

"I remember I used to work in a blue smoke in those days and I did my designing on big sheets of green paper. Once I got started it was almost as if I had turned one of those sheets over and found my design already drawn on the other side.

"The first big idea that came to me was that the balls ought to have some kind of action beside just rolling down the playfield and that maybe I could get them to jump around by using small electro-magnets. The big problem was, where would I find the magnets?

"Suddenly, I realized that right next door to our place was a little plant where they made some kind of electrical equipment. I rushed over there with my drawing and asked the first fellow I met if he knew where I could get electro-magnets.

"The fellow started laughing. 'Look at those shelves, mister. They're full of exactly what you're looking for. They're called solenoids.' "

Harry Williams called his new electrical game Contact. Instead of sitting on a counter like the little penny games, Contact stood on its own legs and commanded five cents. It got its first test in a drugstore on La Brea street in Hollywood.

By this time Williams had joined forces with Fred McClellan, a carburetor manufacturer who was casting around for another item to put into production. Together, Williams and McClellan lugged a hand built model of Contact into the drug store and then settled back to see what would happen.

It wasn't long before a sport slapped the first nickel into the coin slide and then stood slack-jawed as Contact's solenoids kicked the ball across the playfield.

Williams and McClellan watched as customer after customer, attracted by the clattering solenoids, sauntered over to see what was going on and then, as if they were magnetized, bunched around the new game.

When the store closed that night, Williams made a dash for Contact and opened the cash box. It was overflowing.

"I think," said McClellan scooping up a pile of nickels, "we had better get this contraption of yours into production."

Harry Williams was on his way.

McClellan bought the manufacturing rights to Contact giving Williams a roy-

alty on each game, and set up a small shop on Pico street which is now pinball row in Los Angeles. Part of the deal was that Williams would work on ideas for new pin games.

McClellan started manufacturing 10 Contact games a day which he sold for $75 a copy. Thanks to the addition of a jangling bell—another Williams brainstorm—to each solenoid, sales soon doubled. But the company was still small time compared to the huge pinball outfits that had sprung up in Chicago. Any one of these could bang out 1,200 pin games a day without even overheating a drillpress.

In the Spring of 1934, Williams and McClellan took Contact to the big, annual coin-game trade show in Chicago in hopes of getting one of the big-time concerns to manufacture the game on a royalty basis.

By the time the show closed, Williams and McClellan had more orders than they could possibly handle. Their clattering solenoids and jangling electric bells had sounded the death knell of the mechanical pin game and every big-time company in Chicago knew it.

The best royalty offer came from Ray Maloney, head of the Bally Manufacturing Company; a pin game behemoth. He offered $6.30 per on 10,000 games for manufacturing rights, plus $1.50 to Williams for a royalty override.

With his money almost as good as in the bank and his name established in the industry to boot, Williams hopped the first train West, busily calculating how much of a factory he could set up for $15,000.

His calculations were cut short at Albuquerque by a wire from McClellan. The deal had blown up. Williams, his $15,000 gone a-glimmering, piled out of his Pullman and grabbed the next train East.

When he got to Chicago, Williams found McClellan deep in plans to manufacture Contact himself.

As it turned out, McClellan sold some 23,000 Contacts before the public lost interest in the game.

Williams headed West again, still hoping to make Los Angeles the base of his pinball operation. He did nicely manufacturing two new games, Action and Signal, and royalty money sifted in from Contact steadily enough so he could relax a little. No one could know it at the time, but Harry Williams was on the verge of another major pinball invention.

If the pinball game has contributed nothing else to American culture, it unquestionably must be credited with a dance form that lies somewhere between Martha Graham and professional wrestling. It is called, in the trade, gunching and consists of a series of nudges on the side of the cabinet. Not infrequently, gunching is augmented by body English: a peculiar writhing and twisting reminiscent of a fat lady trying to get into a wet girdle. The theory behind body English is that some kind of physical magnetism will influence the course of the ball.

In the early days, body English was rarely practiced but the repertory of the uninhibited guncher included an indoor

version of the drop kick, knee clouts and an occasional right cross to the cabinet. A gifted guncher of that era could reduce a brand new game to kindling in a matter of days.

Williams saw his first exhibition of serious gunching in a Los Angeles smoke shop run by a sad eyed little man named Maxwell. Williams was trying to make himself inconspicuous as he watched the action when a bull necked individual boiled in and promptly threw a series of holds on the game that would have flattened Hackenschmidt in his prime.

When the guncher lifted the front end of the game bodily and went into a bear-like waltz trying to guide the ball into a high scoring hole, Williams darted over to Maxwell.

"My God," he groaned. "What's that character doing with my game?"

"You have seen nothing," little Maxwell said sadly. "I used to keep a score card here and give a box of cigars to the customer who made the most points in the week. Had to cut it out. Those big loogans come in here, flipped the games around like frying pans and run up any kind of score they wanted."

"I'll fix that," muttered Williams.

Next morning he was waiting outside when Maxwell came to open up. Williams looked a little haggard, but it was understandable. Beside him stood what he was sure was an ungunchable version of Action. He had been up all night working on it.

"Give me a hand with this," Williams asked the location man, "but be careful. Don't try to lift it by the cabinet. Grab hold of the legs."

"What's the matter with the cabinet?"

"Look underneath," said Williams slyly.

The location man stooped down for a peek. When he stood up he was grinning. The underside of the game bristled like a porcupine. Williams had spent the entire night driving nails down through the bottom of the cabinet.

Together, they trundled the game into position and sat back to watch the fun. They didn't have long to wait. Bull-neck breezed in on schedule, got a dollar's worth of change, slapped it down on top of the game along with a pack of smokes and settled down to work. His first ball was half way down the playfield when he saw a chance to gunch a few extra points out of it, grabbed the cabinet and heaved.

With a roar, bull-neck dropped the game, glared at his perforated hands, and peered under the cabinet to see what had stabbed him. Then, with a sneer at Maxwell, he wiped his hands on the side of the game, shot another ball and, grabbing hold of the smooth legs, proceeded to wrestle the game around with more vigor than ever.

Williams' already drawn face was ashen. "I'll be back, Maxwell," he said softly.

He was, in less than an hour, pushing a wheel barrow full of sand.

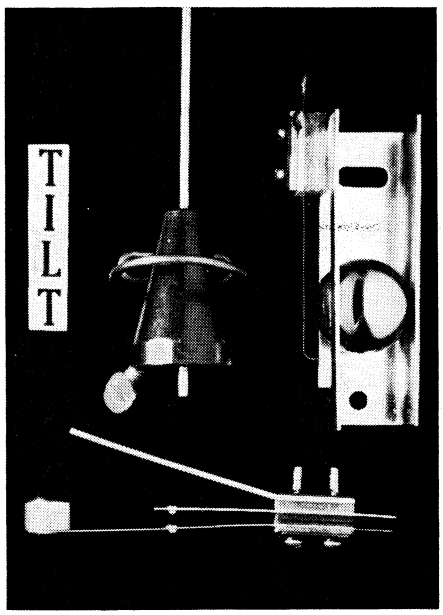
"Ballast," said Williams, resolutely. "This'll fix 'em." By the time he finished filling the bottom of the cabinet with sand it seemed obvious that the gunching days were over.

The next morning, Maxwell was on the phone. "Harry," he croaked. "You've got to get that sand out of there. I went to move the game this morning so I could sweep and I almost gave myself a double hernia."

Ballast wasn't the answer.

Williams disappeared into his shop with a far away look in his eyes. In the next three days "Stool Pigeon"—the grandfather of TILT—was born. The original device was simply a ball bearing balanced on a little pedestal. If the bearing was knocked off during play a small gate lettered "Stool Pigeon" swung into view and any score on the game didn't count.

Williams carted a game with a test model of Stool Pigeon built into it down to Maxwell's smoke shop. Before long a guncher and a couple of pals swaggered in and went to work. About the second or third ball, the guncher saw his chance, and gave the cabinet a massive whack.



Williams' major contribution to pinball: the guncher-thwarting TILT mechanism.

With an irritating rattle, the bearing tumbled off the pedestal and the little gate swung gracefully into view.

"What's with this Stool Pigeon?" bellowed the guncher. "What's the matter with this game?"

"Nothing at all," murmured Williams innocently from his station near the magazine rack. "That's just something new they've put out. Acts like a referee. I wonder what they'll think of next?"

Stool Pigeon grounded the rough and tumble guncher, but it was an awkward arrangement. Moreover Williams, a man of taste, didn't like the name. What he wanted was one short word. Try as he would, he couldn't think of one—not until a Saturday afternoon when Williams was watching a crucial engagement between two expert pin shooters. One of them, a refined guncher of rare ability, got carried away and began tapping the cabinet with the heel of his hand harder than usual.

"Watch out, watch out!" cried an afficionado. "You'll *tilt* the damn thing."

Harry Williams had the word he was looking for.

Around the middle of 1934, Williams turned out a game called Multiple. It was the first to contain the fundamental principle employed in all TILT mechanisms ever since. He had taken a length of ordinary house light pull-chain and let it dangle through a short length of metal tubing. Any violent gunching swung the chain against the tubing, closed an electric circuit and lit up the TILT sign.

By this time Williams was aware that the Chicago manufacturers often took a very relaxed attitude toward patents, the prevailing idea being to use an idea while it was hot and worry about law suits later. It would be useless to try to protect his idea. Within a matter of weeks, the Williams TILT mechanism was standard equipment on everybody's pinball game.

In the Thirties, gunching, refined to a subtle art because of Williams' sensitive electric TILT, was symptomatic of a much more grievous industry ailment. The inspired guncher was usually playing to win something—and the fast buck boys soon spotted the potential of a pinball game that paid off. Before long a sizeable segment of the manufacturers were turning out games that were little more than slot-machines with lights.

When the law took fire-axes to the games that brazenly chunked out nickels, all manner of weird dodges began to turn up. Some games spat tokens, others clicked off tickets—both presumably redeemable in merchandise only. But they were thin dodges at best and reformers laid siege to the pinball industry.

Some manufacturers began a frantic hunt for something that would keep the law from hanging a permanent TILT sign on the business.

Then, on December 25, 1934, U.S. Patent No. 1,985,736 was granted. It was a step-brain-child of Harry Williams', and it changed the whole climate of the pinball industry. It was a gadget that enabled pinball games to offer a legal incentive to hot-shot shooters. It came to pass like this.

Williams had a janitor named Bill Bellah who kept pestering to try his hand as an inventor. One day, in self-defense, Williams gave in. "All right, Bill," he told Bellah. "You invent a game that will pay out nothing but amusement."

Williams didn't hear a peep out of Bellah for six weeks. Then one day Bellah turned up with a cobbled-up contraption that looked like a home made bomb. "Mr. Williams," Bellah said, softly, "build me a machine to go with this."

It didn't take Williams long to see he had lost a janitor, for Bill Bellah had found what the whole pinball industry was looking for: an apparatus which could be adapted to any kind of pin game and which automatically delivered perfectly legal free games to winning players.

The real beauty of Bellah's contraption was that having won a free game, the shooter could play it out by merely shoving the coin slide in. This meant he was completely independent of the gent be-

hind the counter. Before Bellah's device, even the shooter who really intended to play out his free games, had to collect a nickel for each game he had won from the location man simply because there was no other way to activate the machine except by sticking a nickel in it.

Williams gave his ex-janitor a lump sum in cash and agreed to pay him 50 percent of all royalties in exchange for the right to manufacture the free-play device.

Today, leaning back in his white leather executive chair, Harry Williams often wonders what happened to his ex-janitor, Bill Bellah. "Gee," Williams says wistfully, "I wish that kid was around now. He had a real fertile brain."

In 1935, Harry Williams' own fertile brain was very much in demand. Although he had his own company running nicely in Los Angeles, he considered an offer from Dave Rockola, one of the big Chicago manufacturers, to be chief inventor of the company's game division. Williams turned his own business over to his father and headed back to the Midwest.

One day while Williams was coping with his new inventing chores, a bushy haired youngster flailed into his office. His name was Lyndon Durant and he was about as tactful as a tornado.

"Mr. Williams," he blurted, unlimbering a sheaf of drawings and hauling out a model. "I've got a score totalizer mechanism here that makes every other totalizer on the market completely obsolete."

Williams ignored the fact that at the moment Rockola was using a similar device that he had, in the main, developed himself, and took a look at what Durant had. The device was almost as good as Durant claimed. But it was Durant, fire-eyed and full of ideas as a school boy in a harem, that impressed Williams.

In less than a year Williams had closed his own plant on the coast and left Rockola to become part of Ray Moloney's creative stable at Bally—and who should he find tethered in one of the Bally 'Nut Houses' (a semi-affectionate term for the premises occupied by the inventors) but Lyn Durant.

When, within six months, Williams was lured out of Bally to take over the game division of the Exhibit Supply Company, Durant went along with him.

From the start the team of Williams and Durant clicked. When World War II closed down the multi-million dollar industry by classifying pin games as non-essential, Durant and Williams went into business on their own.

What they had in mind was rebuilding and repairing old games until their company could qualify for war contract work. It was a hare-brained scheme.

The Williams-Durant operation, optimistically called the United Manufacturing Company, was set up in a gloomy old loft. Before long practically every inch of space was jammed with games waiting to be reconditioned. The only trouble was United had nothing to recondition them with.

"We had made a few miscalculations," Williams recalls. "One of them was thinking we would be able to get some of the materials we needed to work with. When we got in business, we found we couldn't get *anything*, not even a spool of solder.

"After a couple weeks we were certain we could get the war work if we could just get our company under way. But there we were, surrounded with work and nothing to do it with."

One afternoon Williams and Durant were gloomily sitting in their office when Durant suddenly jumped to his feet. "What the hell's the matter with us, Harry?" he spewed. "We're practically surrounded with everything we need, solder, parts, the whole works!"

Williams figured his partner had finally looned-off under the strain.

"In the games, Harry! In the goddam games! We'll strip the worst ones down, melt the solder out and use the parts to fix the others!"

Between them they hauled out a huge tarp, spread it on the floor to catch the precious solder and began tearing down the games themselves. It was slow, but it worked. And, inside of the first month, they also picked off a subcontract to produce electrical cables. United was a going concern.

In June of 1942, Williams sold his part of United to Durant, started up the Williams Manufacturing Company, snaffled a subcontract to manufacture radar sweep units and once more dug out on his own.

In less than 10 years, Williams, just turned 40, decided to get back to the Pacific Coast. He sold 49 percent of the company, bundled up his family and headed back for Los Angeles. Theoretically, he planned to dream up new ideas for games that the boys back in Chicago could manufacture.

In the eight years Williams tried to be an absentee genius, he thought up only one really hot game idea. Williams Manufacturing, turning out one mediocre game after another, was headed for trouble.

By 1955 Williams had to head for Chicago. Back on the job he made a terrifying discovery. In eight years the entire pinball industry had changed and Williams found himself completely at sea. For almost a year he floundered around trying to get the feel of the industry he had helped to create. Sitting behind his huge white desk today Williams winces at the thought of those times. "The industry had passed me by and I couldn't seem to get my touch back. Other inventors had developed the pin game to the point where it didn't seem possible to develop it any further. What I had to find was a whole new idea.

"One night I went to a movie. It was an Italian picture and there was the saddest little kid in it. In one scene he sees a puppet, and there go his troubles—boom, just like that.

"Gee, I thought. That's it! A coin-operated puppet kids can run!"

Peppy the Clown, a puppet the kids could make sing and dance for a dime, hit the super-markets and dime stores late in 1956. Peppy did well enough, but Williams still wasn't satisfied.

While his partners kept things going by turning out successful, if conventional pin games, coin-operated pool tables and bowling alleys, Williams holed up, puttering and tinkering. When he finally came out, he had a real eye-popper—a game that enables a player to operate two elaborate electric trains in an extremely realistic setting.

"Funny thing about this one," Williams observes dryly. "It was designed for kids but they don't get much chance to play it. Can't get past the grown-ups standing in line waiting their turn."

Trains and singing puppets are a far cry from Contacts' clattering solenoids. But as a lot of top pin men in Chicago will tell you, it looks as if Harry Williams, the old maestro, has got the feel of the track again and is off and running true to form.—**J. P. Cahn**