1929 -- the year of the great stock market crash. Halfback Paddy Driscoll was in his final season with the Chicago Bears after a brilliant career. He'd seen it all and he had a grizzled veteran's mixture of amused tolerance and lordly disdain for the curious ways of rookies.

Still, the kid guard bustling away in one corner of the Bears' Wrigley Field dressing room was something new to Paddy. For nearly an hour the big youngster had been fooling around with several pairs of shoulder pads, first punching holes with an awl, then stringing parts together with leather thongs, and then back to punching holes.

Paddy ambled over and stood beside the busy rookie for a few minutes. "Doc, you sure are doing a lot of fussing with all that equipment. What are you -- a shoemaker?"

"Paddy, I'm trying to make a good shoulder pad for tackling without injuring my shoulder."

The veteran nodded, not yet certain whether the kid was serious or not. Paddy Driscoll figured to know all about shoulder pads and tackling -- he'd been playing pro football since before there was a league.

The kid held up two strips of fiber board, each two inches by eight inches. These, he explained, would be taped over his shins. "I want to protect my legs from osteomyelites disease," he explained.

Double-talk! thought Driscoll and walked away, convinced the kid was putting him on. Rookie guard Joe Kopcha went back to "fussing."

Kopcha was a fine young lineman in 1929. That was usually worth about $100 or so per game, but owner-coach George Halas -- never known for the alacrity with which he parted with a buck -- added another $20 to the rookie's paycheck each game because he was in medical school and could help the trainer.

Sports medicine in those distant days was seldom more than a rubdown for aching muscles and a squirt of tobacco juice for a cut. However, Kopcha applied himself to preventing injuries -- at least to himself.

"Shoulder pads in those days were nothing more than epaulets -- like a hotel doorman wears. I resurrected a set to actually fit my shoulders and protect my collar bone and the acromio-clavicular joint," explains Dr. Joseph Kopcha, today a highly respected Gary, Indiana, medico. "Acromio-clavicular -- shoulder joint -- injuries occurred from tackling. My concept of the shoulder pads generated from an injury to my left shoulder. As a result of that injury, I pinpointed where the fault was and covered my shoulders with an extra 'cup' of leather and felt, overlapping the shoulder joint.

"I was quite handy with an awl and leather -- in my younger days I even soled my own shoes -- so, with two or three old discarded shoulder pads, I put together one good set.

"I was sitting there, using an awl to make holes in the leather of the shoulder pads -- building pad upon pad and cupping them so that the pads fit way over the shoulder joint, along with an extra layer to protect my chest -- and a Spalding salesman was in the dressing room, trying to sell Halas some equipment. He watched me tightening up the
cups upon cups with leather thongs. When he asked me what I was doing, I explained what I had in mind to protect myself from injury in tackling.

"Well, I didn't think anything more about it at the time."

Kopcha took 1930 and 1931 off from football to concentrate on medical school. In 1932, he returned to the Bears to win All-League honors three straight years.

"So -- two years later, when I came back to the Bears -- I can't recall whether it was the same salesman or not -- it must have been -- because he came over to my locker and showed me how the company had reinforced the pads and asked me if that was what I had wanted.

"I said, 'That's fine, but I still think you need more coverage over the shoulder joint because that is the most vulnerable spot. And also put some more padding under the cups and reinforce it above.'

"Sure enough, the following year, they came out with a much improved shoulder pad with much better workmanship. It was lighter but it made the players look a lot bigger. Most important, though, it gave better protection when tackling."

Kopcha will never know how much he could have made had he patented his shoulder pad design. "I didn't even get a consulting fee," he says. "But, what-the-heck! There's a lot of guys walking around today without banged up shoulders who otherwise might be crippled. That's a terrific reward!"

"Besides, I haven't missed much."

A native Hoosier, Kopcha earned ten sports letters at the University of Chattanooga. His pro football career was short by modern standards -- five seasons spread over seven years -- but he played in some of the most famous pro games ever.

"I was with the Bears when Ernie Nevers scored 40 points against us in 1929. What a player! Then, when I came back in '32, we won the championship in that indoors game on an 80-yard field against Portsmouth. The following year we won again. That was the first official championship playoff, and we beat New York, 23-21, at Wrigley Field."

Kopcha remembers the 1934 team as being even better. Some have called it the greatest team to ever not win a championship. "We had Beattie Feathers running with Bronko Nagurski in front of him. Unstoppable!"

But Feathers and Kopcha were both injured for the championship rematch with the Giants and the field at the Polo Grounds with a sheet of ice. "New York put on those damned basketball shoes in the second half and ran away from us. All our guys could do was slip and slide."

That New York victory will be forever known as the "Sneaker Game."

Kopcha has remained in touch with George Halas over the years, holding him in the highest esteem. "I asked George to trade me to Detroit in 1936 so I might intern there. That season I helped the Lions beat the Bears and to this day he reminds me that it was one of his poorer trades."

After the '36 season, Kopcha left football to do post-graduate work at Western Reserve University hospital. During World War II, he was Major Kopcha. He served in the Pacific Theater, in Australia, New Guinea and the Philippines, for 21 months and later became a flight surgeon after training at Randolph Field in Texas.
Settling in Gary after the war, he became better known as an obstetrician than for football. ("When newspaper man, "you think of babies.")

Undoubtedly, it was a surprise to many when their "Doc" was named to the Indiana Football Hall of Fame in 1977.

Besides redesigning his shoulder pads along modern sophisticated lines and adapting small fiber boards as shin guards ("They used flying leg blocks back in those days and the blockers' heels would strike you across the shin bones and hurt like hell"), Joe also "fussed" with his helmet.

"What we had then was like a skull cap, just a leather helmet with a little padding. I put two feet of padding in at the top and glued extra felt along the inside. Some guys kidded me, but I never had a serious head injury."

Joe does a lot of kidding himself these days. He keeps a small printing press in his cellar and often spices his correspondence with amusing printed messages. (Sample: the sober inscription -- "Remember, you're not finished until you've done the paper work!" along with a picture of an old-fashioned outhouse.)

He's a charter member of P.F.R.A. And, he's a fixture at the Gary Old Timers Athletic Association Banquets where he leads the group in singing the "Star Spangled Banner." Wherever he goes, "Doc" is a popular after-dinner speaker.

He can spin a yarn with the best of them, but when he remembers how he helped improve football equipment the physician in him takes over and he speaks in dead earnest.

"Years after he retired, Paddy Driscoll checked into the Mayo Clinic because of a painful hip. The trouble, stemming from an old football block, was diagnosed as osteomyelites. Paddy shook his head in disbelief. 'Do you know,' he said, 'years ago -- back in 1929 -- we had a medical student that used that word. I thought he was crapping me!'

"A lot of guys got hurt needlessly in the old days. I like to think that my ideas helped change some of that."

Ed. note: Dr. Joe Kopcha died in Hobart, IN, in 1986. He was 80.