

riculturally and industrially. We are marketing in the industrial field through a pump manufacturing company. We registered a trademark so no one can use our product name.

"Marketing and advertising were our biggest problems. We learned as we went along through trial and error. We know that by controlling the product ourselves we will realize more financially from it. We think that, if you have an idea, you should go for it! Most farm manufacturers, including ourselves, are happy to hear about new ideas from farmer-inventors."

Rope Wick Applicator — Jim E. Dale, plant physiologist at the USDA research center in Stoneville, Miss., is the man credited with inventing the rope wick applicator for applying herbicides, such as Monsanto's Roundup, on tall-growing weeds in row crops or pastures.

"We started by wrapping rags around a boom in front of the tractor," says Dale. "That didn't work because the rags dripped chemical and snagged on weeds. I remembered the wicks in old kerosene lamps years ago, and began experimenting with the idea. When I discovered that it worked, I exposed the invention widely before other scientists, through farm magazines and news releases and by offering free "do-it-yourself" plans to farmers.

"Some 30 manufacturers have licensed the ropewick applicators and probably another 30 produce them without a license. Manufacturers who substituted cheaper, inferior materials that failed to function properly were the biggest problem with getting the idea on the market. When difficulties were reported to me, I contacted both manufacturers and customers.

Dick Rayl, Marketing Director, Mayrath Co., Compton, Ill. — "If you think your invention is good enough to make you rich, your best bet is to find your own financial backers to manufacture and market the product. Many successful companies have been built around a single 'great' invention. On the other hand, very few inventors with a 'great' idea have gotten rich by selling it to a company on a royalty or licensing basis.

"We're interested in new products and welcome the opportunity to talk to farmer-inventors about their patentable ideas."

Automatic Pto Coupler — F.B. Recker, Dyersville, Iowa got a \$10,000 up-front fee from Deere & Co. plus a royalty of \$.40 a unit to be paid once his quick detach safety coupler comes on the market. The agreement is unusual in that it's non-exclusive so Recker can continue to peddle the idea to other manufacturers — and even make them on his own, if he chooses. In order to sell the coupler to Deere, Recker took the invention directly to the company's forage equipment manufacturing facility in Ottumwa, Iowa. The company is still in the process of testing the coupler, which locks automatically without cocking, which is necessary with the unit now used on Deere equipment.

"Rivet Eze" Sickle Section Tool — Albert Johnson, Wahpeton, N. Dak.,

gave his patent attorney a share of the profits off his Rivet Eze sickle replacement tool in return for his services.

"Finding a manufacturer for a product is never a problem if there is a market for an idea," he says. "I first took the Rivet Eze to an implement dealer and he, in turn, put me in touch with a manufacturer which eventually led to the right home for this product. You should beware of making large investments in manufacturing if that has never been your game."

Johnson licensed the Rivet Eze under a royalty agreement to the manufacturer and later sold the product to the manufacturer because his patent was not tight enough to prevent anyone else from producing a similar tool. "The manufacturer told us he was actually buying the name which was trademarked."

Harold Hansen — "I've worked with farmer inventors for 40 years. They're a good source of creative talent," says Harold Hansen, Cordova, Ill., who was formerly Deere & Co.'s manager of product engineering at the John Deere Planter Works, Moline, Ill. The holder of some 46 U.S. patents (including one on the popular Max-Emerge planter), Hansen, now retired, serves as a consultant to inventors and calls his company Harold Hansen, Inc.

A reputable patent attorney pays off. There are patents written where the claims are so improperly drawn and so vague that anyone trained in the art could design around them. The inventor has a patent but it may not mean a thing because of the claims.

It is possible for an inventor to contact a manufacturer even though a patent has not been applied for. The manufacturer generally has legal forms for both parties to sign before any ideas are discussed. These forms say in effect that the manufacturer was shown the design on a certain date. With a well-documented diary, the inventor is protected. A manufacturer, if interested, is generally willing to work out an agreement to develop the design for production and marketing on a royalty basis and might also pay for the patent, which would be in the inventor's name but assigned to the manufacturer. There are many ways an agreement can be made. Few designs as made by the inventor fit the manufacturer's production facilities so it has to be redesigned or production and field-tested for reliability.

Hydra-Marker Coding System For Hydraulic Hoses — "Everybody thinks that, because they have a good idea, somebody is going to buy it from them and make them rich. I can tell you it doesn't happen that way," says John Kapphahn, Elbow Lake, Minn., who has two patented products on the market and has taken a different approach on both of them. His first invention is a set of color coded markers for hydraulic hoses. He manufactures and packages them himself and sells through an established Midwest distributor. The second, called the Guard Bender, is a straightener for sickle guards that he

"Do-It-Yourself" Patents

Inventor Joseph Molitorisz, Bellevue, Wash., files and executes his own patents without the aid of a patent attorney. He thinks every inventor should do the same.

Molitorisz is the inventor and manufacturer of a new baler (featured in FARM SHOW's Vol. 6, No. 1 issue) that makes square bales about the size and density of conventional round bales, with one rounded end that sheds rain when stacked in the field.

Critics say it's difficult or even impossible for most inventors to put together viable patents on their own, but Molitorisz says he's disproved all that. "I've obtained 18 patents on my own and all have been sold or licensed to other manufacturers, clear proof that you can do it on your own. I sold one patent to a major manufacturer for \$250,000, so I must be doing something right. I don't think they would have bought it if it had been a poor patent."

When Molitorisz invents a new machine, he first goes to the nearest library that contains patent records — most large cities have one or two patent centers — and pulls all the patents he can find on machines similar to his invention. When he is relatively certain that he has indeed come up with something new, he then uses the similar patents as a pattern for writing his own patent application, filling in the different wording and claims for his machine but following the order of the other documents.

"You must be logical, clear and concise. By reading the pa-

tents you get an idea of the wording needed," he says, noting that the first application doesn't have to be perfect since patent examiners carefully examine each application, pointing out mistakes.

Once written, Molitorisz submits his application, along with drawings and the required filing fee. The first thing the patent office does is pull all similar patents and send them to him. In effect, he says, the patent office does a complete search, a service for which most inventors pay hundreds of dollars before they even apply. Then, examiners go through the patent itself, usually rejecting it for one reason or another.

"I've always found examiners to be very helpful and cooperative. They point out mistakes and make suggestions, calling me at their own expense to help make the patent stronger," he notes.

Once a patent is rejected, the applicant has three months to fix it up and send it back. Molitorisz says that, at this point, you can go to a patent attorney if help is needed to get it in shape.

"Some patent attorneys in Seattle are charging \$120 an hour for patent work so I would encourage inventors to try to work it out on their own. You can get help from inexpensive patent office publications that explain the whole process," he says.

For more information, contact: FARM SHOW Followup, Joseph Molitorisz, 15326 S.E. 43rd Road, Bellevue, Wash. 98006 (ph 206 392-3990).

discovered, would not be cost competitive if sold through a distributor. Consequently, he manufactures and markets the Guard Bender on his own.

"No one's going to beat a path to your door and there's no point in going to a distributor with a product like my hydraulic markers expecting them to do all the work. I spent about \$20,000 to put together a total retail package that was ready to sell. I hold all rights to the product and simply sell to the distributor at a discounted price of about 20%. I'm still talking with the big manufacturers about equipping their machinery with my product. Once I had the product on the market, they were much more interested."

Tractor Sweep Rake "The tractor sweep rake was my most successful invention although it's not on the market anymore. I invented it in 1934," says Otho Clark, Independence, Mo.

"Another young man went in with me on the rake and we gathered up \$250 and built 10 rakes. We put one on a special trailer and made a trip

out into Kansas and sold a couple.

"In 1937 and 1938 we got space to show the rake at the Nebraska State Fair. A buyer from Sears Roebuck & Co. saw our display and listed our rake in their catalog. In the fall of 1941, a Sears buyer offered to give us an order for 500 rakes if we would give them the rakes on an exclusive basis. I told them I couldn't do that since a number of dealers had been with us from the beginning. Sears gave us an order for 750 rakes anyway.

"With the advent of the war, we were limited in the number we could make but towards the end we were allowed to make as many as we wanted to. Sears gave us an order for 2,500 rakes. At the close of the war, pickup balers came out and sweep rake sales shut off. We began making other equipment but we couldn't have done it without the first product. One reason for our success was our patent. One of the smartest manufacturers in the country said there was no way around our patent."

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