tackle, flashlights and batteries, tools of various kinds. skates, various kinds of sporting goods,-you can imagine that we run into the problem of seasonal and territorial demands. It quite obviously becomes a large part of our task to clearly ascertain what are these seasonal and territorial limitations.

Then, too, in these days of protest against existing prices, particularly as we are situated in one of the branches of industry in which prices are still climbing. it is quite necessary that we know very closely about price changes and price trends. In one respect all of you have the same job that we have. You have to keep an eye on competitive activities. We have several very lively and very efficient competitors.

And then another thing that we have to do,-and it is no small task; in fact it has become one of our great problems,-is the study of packing and shipping methods. Those of you who have tried to get labels, shipping boxes of almost any kind, cartons and so on have some realization of what it means to put three or four thousand new products onto the market at the rate of twenty-five or thirty or forty a week and attempt to get packing material and get it right for all these various products, particularly when you are trying to put them out as a family of products and carry through the entire packing certain attractive merchandise ideas.

For the sales production crew we do another thing, an essential thing. We try to give them advance reports on new products and changes in old products that will affect sales efforts; try to give them this so far in advance that they can do some intelligent sales planning. We carry on in the Winchester organization a very extensive dealer service, perhaps more noteworthy in some respects than anyone else has been attempting; and we undertake to do for the sales production such engineering work, or give them such assistance in the engineering phases of the work as is possible. This applies to getting up exhibits, the preparation of salesmen's equipment, all those things which the technician must have a hand in; and in our case they delegate much of this work to the sales engineering staff.

We render such assistance as we can in convention and club work. We keep up an advisory inspection of the sales efforts and results. Not that we have power to control their actions because a functional type of business is founded primarily upon a theory of cooperation. There is a very little control

must cooperate or drop out. We do special research work of all kinds for this sales production staff for the reason that they have not the men or the training for that type of work.

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Furthermore, we retain the final approval on all models of new products and on all new packing. After the manufacturing engineers in the factory have got through with their work on samples, it must come back to the sales end for its final approval and that final approval rests with us. But that, gentlemen. is a matter of organization, because it happens only rarely that we pass final inspection or final approval upon a new product until we have called in conference the men who later will have to sell that product. In other words, we try at the time to sell this new product to them, because if they do not believe that it is correct in design, in finish or in any part of its manufacture, they will never put themselves in a position to get strongly back of it when it comes to the distribution. That again I say must be built upon a spirt of cooperation.

Sales engineering has some contact with advertising. It consists largely in certain merchandising studies; and by that I mean studies of the methods of merchandising in regard to display, even to pricing. We have control of the pricing in the sales engineering organization. I don't know whether that is permanently so or not, but for the present we are holding it there. We try to furnish them with all immediate technical information for any kind of publications that they may issue. We do for them special field or advisory service as we do for all other parts of the organization, and we give them very specific reports on seasonal and territorial variations in consumer demands; and those of you who are familiar with the money that has been wasted in improper advertising will realize just how essential that is to the advertising department. I do not mean that they cannot secure it from other sources, but they cannot secure it so accurately from other sources as we are able to furnish it to them. And perhaps that needs a bit of explanation.

We are building up a chain of hardware stores in this country. In fact we are building up two chains of hardware stores,-combined hardware and sporting goods stores if you please. We purpose having one exclusive agent in every town in the United States large enough to support a desirable agent. That agent will have the exclusive sale of all of our in our business of one department by another. A man new products, but not of our old line of guns and am-

munition. We purpose also having eventually in every city of 50,000 or over, stores of our own, and some of those stores are now open in New England.

You can see, then, having these stockholding agents,-and these agents are stockholders in our business only in a small way but nevertheless it gives them a real interest,—that we are able to go out into any section of the country and get some specific reports given to us by men who are friends and have a selfish interest in our welfare. There are few sales organizations thus happily placed.

Sales engineering has little to do with the warehouse department in our organization. The warehouse department is an entirely separate organization reporting directly to the general manager and having some control over what they also term merchandising, which is the distribution problem in its physical phase and the maintenance of stocks and the placing of orders on the factory. In other words, they become also a buffer between the factory and the sales organization. We fur nish them with the initial sales requirements on all new products. We give them early information of unusual demands or unusual trends. We give them the same interpretation of basic statistics that we furnish to sales production, and we do for them occasionally some field service.

One of our closest tie-ins very naturally is with the manufacturing engineers, because our work is to select the line and their work is to develop it. We give them specifications of our new products. These specifications are fairly minute. We have the responsibility for the standardization of lines. I do not know whether you appreciate just what that means unless you have been in a business similar to some of those in which we are engaging.

Prior to the war one of the largest pocket knife manufacturers in this country made over six thousand different patterns of knives. We think .-- we haven't been tested out thoroughly yet but we have somewhat,-we think that we are covering every need of this country with a sufficiently diverse line of pocket knives with one hundred and twenty-nine patterns, and the best evidence that we are on the right path is that the largest hardware jobber in this country controls a pocket knife factory and he has followed our lead and gone us one better by cutting down to one hundred and sixteen patterns. Another evidence of what standardization means is in our venture in the manufacture of flashlights. We carried standardization there to what many thought was

beyond reason. But about a month ago our largest competitor, which practically dominates the flashlight field, reduced its line from seventy-seven patterns to thirty-three. In other lines we have likewise been followed by competitive manufacturers who have welcomed our lead in this great problem of standardization, because standardization means two things: It means an increase in the size of the orders that you can place on the factory in one lot, and it means a smaller investment and a more frequent turn-over for the dealer who has to carry those goods. Both considerations mount into large sums of money.

We furnish to the manufacturing engineers the specifications for packing methods. We procure for them competitors' products as samples,-not always the easiest task, although it sounds very easy. We give them the specifications for marking the product, always a point of contention and something in which the merchandising and not the factory element is the supreme element.

To give you an illustration of that, we are undertaking to put upon all of our products the symbol number by which we designate them on our factory orders and our accounting forms; and already in the short space of time we have been busy at this we have had articles in the trade press of the country commenting upon our activity in this matter and calling upon other manufacturers of hardware to follow in

When projects conflict, as they sometimes do because of the failure of schedules, we advise the manufacturing engineers as to the priority of the various projects concerned. We give them certain advice or service in the development of new products, because the men working with us have had very fine sales experience and really know quite well the consumer demand that exists and they also know because they have been making a study of all the points of merit in competitive articles. Starting out as we are, new, without any traditions or any precedents, we are able to combine those points of merit into a single article in a way that few other manufacturers have been privileged to do.

We have occasion to secure field tests on new products in order that the manufacturing engineers may find out whether their work is accurate or if certain new ideas are worth while. We give them specific reports on initial quantities because initial quantities mean allocation of floor space, purchase of equipment and the making of the master plans for the products.