WAYS OF SPREADING OF WEEDS.

Although weeds may spread by a great many different agencies fully 90 per cent, of the weeds that first blossom in a man's field get there through the seed he has sown. It is practically impossible to clean all weed seeds out of seed grain, no matter how new or complicated may be the machinery we are using. Suppose there remains but one seed in a bushel of grain and that amount is sown on an acre of land, on every acre we have one weed. To the ordinary observer this may not seem a serious matter, but to the agriculturist who thinks, it is cause for immediate action, and if we do a little calculating it is readily seen just how dangerous is even one weed per acre. Suppose that one weed is wild mustard, an average plant of which will produce in a season about 15,000 seeds. Perhaps half of these will shell out before the grain is harvested and the remainder go into the grain. If your field gave an average yield of 20 bushels per acre, in this crop there are about 375 wild mustard seeds to every bushel of grain. Not a large percentage but a good start. This however is by no means the worst feature. Out in the field, in a little spot perhaps not more than a yard square are 7,500 wild mustard seeds, each capable of producing seeds like unto itself. The following year we find in this place a bad patch of mustard, and more than this probably a great number of the seeds have not germinated the first year and may remain in the ground several years before they start to grow.

Of the other 10 per cent, of the weeds that first blossom in a man's field probably the majority find their way there through carelessness and thoughtlessness in the handling of feed grain, screenings, fodder, straw, etc. Three instances that have been noticed will serve to point out very clearly the truth of the above statement. A sample of oats was taken from a gallon measure just as a man was feeding his horses one noonday in August. At this particular time he was working on a piece of backsetting. A tencupful of these oats was examined and found to contain the following seeds: 1,720 tumbling mustard, 123 wormseed mustard, 100 hare's car mustard, 16 buckwheat, 14 Russian pigweed, 11 gumweed, 2 ball mustard, 1 chess and I corn cockle. All of these in a half pint of seed! When we remember that the vitality of weed seeds is not affected by passing through the digestive system of a horse it requires no vivid imagination to realise the extent of the spread of weeds by this means. A second instance of how weeds are spread was noticed one windy day last fall. A farmer was hauling into town, a distance of 9 miles from his home, green out fodder to supply a livery barn. Along the trail where he had passed were picked up stalks of stinkweed and wild oats, and ' in an examination of the load there were found ball mustard, false nex and Canada thistle, as well as the weeds mentioned above. It might be well to add also that in a handful of the oats used for feed in this particular livery barn there were counted 1 wild mustard seed, 1 stinkweed, 3 wild oats, 21 false flax, 71 hare's ear mustaid.

Other agencies are: winds, birds, water and farm machinery, but it must be remembered that the few weeds brought to a clean farm by those methods do little damage. It is the fact that no attention is paid to these few that does the harm. If the man who found that he had one wild mustard plant to the acre had pulled that one he would have had no