come so very near to us that it is well to be on our guard against it, and to know how to repel its attacks in case of necessity. Dr. Lintner, in his Report for last year, gives an account of its appearance in large numbers, and of the damage it inflicted on several farms in St. Lawrence county, New York, at Morristown, opposite Brockville, and other places near the river further west. During the seasons of 1882 and 1883 it was abundant and destructive, but was afterwards apparently killed out, partly by the measures taken to exterminate it, and partly by the unfavourable weather.

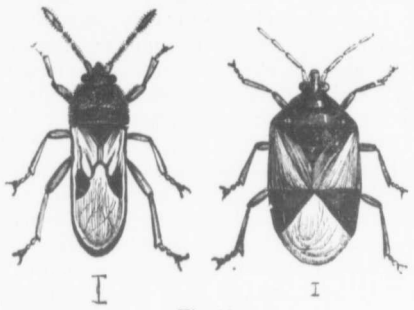

Fig 44.

The chinch bug (*Blissus leucopterus*, Say) is a very tiny creature, and not likely to be recognized by any one unfamiliar with insects. The annexed wood cut (Fig. 44) represents the creature highly magnified on the left, the hair line beneath shewing the actual size; the figure to the right represents an ordinary bug, shewing the difference in shape from the chinch bug. Should any farmer observe in the autumn patches of dead grass in his meadows, looking as if winter-killed, and on inspection find minute insects at the roots smelling like ordinary bed bugs, he will do well to send some specimens at once to a competent entomologist for identification (Mr. James Fletcher, Department of Agriculture, Ottawa, is the proper person to apply to). If it should prove to be the chinch bug, the following remedies may be employed:—

1. Burn the dead grass on the infested spot and fifteen or twenty feet around it. This may be done by spreading over it a covering of straw and setting fire to it when the wind is favourable. 2. Plough the burned area, or, better still, the whole field, in broad and deep furrows, turning the sod completely and flatly over, not permitting it to be in ridges. 3. To insure the more effective burying of the insects that may be feeding upon, or preparing to pass the winter among the roots of the grasses, harrow the ploughed surface slightly and follow with a heavy rolling. 4. If it can be obtained, spread gas-lime over the infested parts at the rate of 200 bushels to the acre. It should only be applied to the parts of the meadow actually attacked, as when fresh it will kill the grass.

Clover Insects.

Between twenty and thirty insects are known to entomologists as more or less injurious to clover in Canada, while many more are found in the United States. The most important of these—seven in number—have been so fully and satisfactorily described and illustrated by Mr. Saunders, in a late issue of these reports (12th Annual Report of the Entomological Society of Ontario, 1881, pages 37 to 48), that I need only refer the reader to his paper, and not attempt to repeat the matter here. The Clover Seed Midge is also referred to by Mr. James Fletcher, in his report for 1885, to the Minister of Agriculture at Ottawa (pages 12 and 13); the remedy that he has found most effective in Ontario, where this tiny insect has proved very injurious where clover is grown for seed, he gives as follows:—

"The only instances where any seed has been reaped are where, instead of allowing the clover to stand in the field till the end of June, it has been fed off by cattle and sheep till the beginning or middle of June, and then left to go to seed for the autumn crop. . . . The verdict of all the growers who have tried the experiment now seems to be that two crops cannot be secured, and to get any seed at all the first crop must be pastured until the beginning, and not later than the middle, of June. In this way the minute larvæ of the flies, which are to lay the eggs for the second brood, are eaten by the cattle at the same time as the clover and destroyed. It is quite apparent that, if all persons will adopt this plan, much good will be done, and if some fall dressing for the land can be devised to destroy the hibernating brood, we may hope before long to get rid of this injurious insect."