

and bleached by rain, thick upon the ground, where the cows had been. It was a cheap scheme and saved a clan's disgrace. That designer would make a model poultryman. But there was a fancier in the case, the artist who recognized in this hastily thought out device, the symmetrical harmony between this crest and the earlobes, face, beak and hackle of the noble Scot.

It hardly comes within the scope of a paper for this meeting, fully to deal with the much neglected department of heating moderately and not too much, the houses for poultry and the providing with fair ventilation, in our zero weather, without entailing draughts. These are subjects requiring more careful study and intelligent watchfulness, in this country of extremes of heat and cold, than any other place where poultry is grown. For this and similar reasons, a paper published in our midst, encouraged by, contributed to, and advertised in by all our fanciers and poultrymen, is an absolute necessity, to the full development of our possibilities in poultry culture. No one knows it all, and the jotting down of our experience for the benefit of the poultry readers suggests reciprocal contributions. The large breeders may do much towards recruiting the ranks of the fancy, by imparting a little from the store of their experience, and it will be found that such contributions enhance such men's popularity among the novices, more than letters boom. The breeds they have for sale and belittling the inmates of their neighbor's yards. The men and women who have successfully grown poultry in this country, can supplement most valuably the information one could acquire from all the eastern and southern papers. Many of the hints useful in warmer temperatures, if followed implicitly here, would lead one to disaster, so poultry articles, properly edited by a competent man of experience in this country, fill a want nowhere else supplied. I happen to know several breeders who find pure bred poultry do not pay, no sale for good stock. Do they advertise? No, others have sent an adv. to the magazine, "Poultry Monthly," and have none for sale. I know a party who refused to advertise, though he had some good stock for sale. A reader of *Manitoba Poultry Monthly* asked me where the same kind of stock could be purchased, I showed him a copy of the paper where it was advertised. The breeder's face lengthened when he saw the birds arrive, at twice the price he was asking; for he thought they were no better than his own. I did not intend drifting into this subject of advertising, but I led myself there, as it were, and I will not take back what I have said. A local paper devoted exclusively to poultry is a necessity to the poultry interests, collectively, and to every

breeder and fancier individually. Returning to the subject of poultry housing for this climate, the best success can be obtained with artificial heat, but in hands of any but careful and experienced persons, it may turn out to be a weapon of destruction. The first requisite is a warmly-built house and here is a serious difficulty. All building material in this country is very expensive. I think the best house to be got for a reasonable sum should be built in the following manner. If a drop in the ground towards the south end can be had, the ends and all the north side may be banked to the roof. Where this is not obtainable I would construct the walls by placing 2 x 4 studs on a sill on the north side six feet high, canting inwards about six inches. Side up with common boards. Let the roof be constructed with the peak four feet from the north wall and eleven feet from the south wall. Have no projections from the eaves. Cover the whole with tarred paper. Outside lay a wall two feet thick of sods, with three inches of fine dry earth next the wall, and see that every layer of sod is laid, slightly sloping towards the building and made very close with fine earth, well pushed into every crevice. It is to keep the sods and earth always tight against the walls, that they are constructed with cant spoken of above, and for the same purpose the inward slope of the sods is downward. Run up the sod wall one foot above the eave. This will allow for settling, and, having no roof in the way, the wall will not be exposed as you will see in attempts to bank with manure, with a roof projecting. On the roof spread straw, or better, chaff, two feet deep and cover with sods. Lath and plaster the whole inside. This I think would prove as warm a house as can be built. The walls could be constructed at great saving, of slabs doubled and stood on end and plastering might be dispensed with. The former way would make a very clean job, and would be poor quarters for lice. For heating and ventilation provide a cheap stove in the centre of the building, jacket it with sheet-iron, a door in the jacket for attending to the stove, the smoke pipe running through the top of jacket. Run a pipe from out doors, at the floor, into this jacket. This brings fresh air into the jacket and warms it. The jacket is close on top as well as sides. The top of jacket is round. From the round run out two pipes, one to carry the warm, fresh air to each end of the houses. See that these pipes gradually slope upwards from the stove. Thus far my plan is explained in the February *Poultry Herald* by Mr. Franklin Benner, a breeder of large experience and success in a climate similar to ours. This gives you a supply of fresh warm air. Now room must be made for this continual inflow of air, and the object to be attained