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## FARM CHATS H. Percy Blanchard, Hants Co., N.S.

### The Tetrahedron

RST of all, I would like to explain to the little boys and girls that this is not the name of a bug or germ; all the same, if they read right along they will find out how to make a kite. A tetrahedron in geometry is the name of a solid figure with the fewest possible plane sides, that is, four sides. Each tide is a triangle. I need a new cook-house. The insur-

ance and the risk prevents me putting my boiler stove in the barn, so a sep-arate building is required. I plan to arake building is required. I plan fo build a "etrahedron." First, three joists, two by six inches, will be laid on the ground as a triangle and the corners fitted and joined. Then a strengthening joist will be put in from one corner to the centre of the oppo-one corner to the centre of the oppo-one corner to the centre of the oppo-one corner to the centre of the oppo-dence of the corner of the corner of the we will take three more sensitings, we we will take three more sensitings. little longer than the joists, and erect them, one from each corner of the base, in shape of a tent. Fastening the tops very lightly, we will nail a few boards on the outside for braces. We will then put in one or two scant-lings in the walls for more strength; planning for a door and a small win-dow. The door, of course, must open outward. The walls will be boarded up to about a foot from the top and the tip-top sawed off square or flat, thus leaving an opening for the smoke pipe. The outside is covered with shingles or roofing paper and a zinc cap put on top as a finish for the pipe. The advantages of such a building are ease and cheapness of erection and a tall peak to allow for sufficient pipe to give-draft and prevent smoking.

Probably the same building with the rroughly the same building with the pipe closed up, and all made tight, could be used for smoking hams. The first building of this shape, I think, was built by Dr. A. Graham Bell at Baddeck, Nova Scotla. The tetra-hedron is the nucleus of his famous man-lifting wites or fiving mechanism. man-lifting kites or flying machines. He reasoned that a flock of pigeons united would lift as much as a single Now I will tell the boys how

#### Made His Best Kite.

He took six sticks of clean spruce, about eight inches long, and not as big as a lead pencil; but a larger size and length would be better for a boy's kite.
Three were joined at their corners as a triangle, the other three erected on the triangle to form a three-sided pyra-A piece of tissue paper was doubled and cut the shape of such a tri-angle but slightly larger. When opened out it formed a diamond. Wetting the tissue with flour paste he cov-This formed the kite. No tail was need

The string for such a kite is fas-tened to the stick covered by the crease in the tissue, which stick is lowermost when the kite is flying. The string is tied about a third of the way from the end of stick, but finding the exact balance point is a matter for experiment. This complete kite aerved merely as a unit in Dr. matter for experiment. This complete kike served merely as a unit in Dr. Bell's structure. Imagine several thousands of these cells, each cov-ered with a beautiful red silk, to form a structure sixty feet long and twenty broad and high. In the centre was the place for the engine and the aero-naut. It was at Baddeck that the first flying machine in Canada ever flew. flying machine in Canada ever flew. (Brantford papers please copy.)

But irrespective of its use as a fly ing machine or a kite, Dr. Bell has shown the utility of the tetrahedron, not only for structural brace work, but for small outhouses as cook houses, well covers, and the like.



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