Mr. Don E. Crabtree Rt. 1, Box 39, Kimberly, Idaho 83341 USA

Dear Don,

To begin with, I was most pleased to receive your letter of January 27, and also quite happy to learn that the books which I had forwarded to you were of some interest to you in your work. It goes without saying that I will keep my eyes open for any other well illustrated publications which might prove to assist your project concerning hafting technics.

This morning I forwarded by airmail a few pieces which you might find interesting, and originating from this country. For reasons which may not be too clear to you, I did not enclose an inventory list, however, this letter will serve in place of same. The pieces are numbered as follows:

- 1. Axe Meilen, Kanton Zurich type Horgen culture.
 Note: Saw-cut visible along one surface.
- 2. Axe Falanden, Kanton Zurich type pfyne culture.
- 3. Axe Furen, Kanton Zurich tape Horgen culture.
- 4. Chisel Maur, Kanton Zurich type Horgen culture. Note: Saw-cut visible along one surface.
- 5. Flint Blade Hitzkirch, Kanton Luzern type Michels-berger culture.
 Note: Pressure flaking along both edges black patena silicium along one cutting surface.
- 6. Side Scraper Storen, Kanton Zurich type Horgen culture.
- 7. Blade Seematte, Kanton Luzern type Egolzwil culture.
 Note: Silicium along both cutting edges.
- 8. End Scraper Storen, Kanton Zurich type Horgen culture.
- 9. Blade Feldmeilen, Kanton Zurich type Pfyne culture.

- 10. Blade Seegübel, Kanton St. Gallen type Horgen culture.

 Note: Heavy silicium along cutting edge.
- 11. Diverse mesolithic tools consisting of:
 - End scrapers
 - Micro thumb scrapers
 - Bladelets
 - Blade
- 12. 4 bone tools, all found in Hitzkirch, Kanton Luzern.

Now Don, this little assemblage is what you might call a "mixed bag" of sorts and our initial aim here was to give you some idea of the types of stone tools which are found in the area. All items listed, with the exception of those under No. 11, represent the Swiss neolithic phase (better known as the Swiss lake dwellers) which date from about 4'000 b.C. thru 1'000 b.C. or the beginning of the early bronze age in this area. There are two pieces which should be of particular interest to you, and namely No. 1 and 4, as there is an unsolved problem of technology involved, namely how exactly these stones were cut. On numerous occasions we have found relatively large blocks of stone showing evidence of having been sawed. These same characteristics are at times found on axes, where the saw scar was too deep to eradicate in the final polishing stages.

As yet, noone has been able to say for certain exactly what technic was used for sawing stone, but various theories have been offered and in specific the following two:

- a) with a piece of flint
- b) with a sand stone plate.

With the second alternative, the most feasible way to saw a stone having a diameter of, shall we say 10 cm, would be to make a cut approximately 3 cm deep (roughly 1/3 of the thickness) after which dry pulp wood would be used to fill said cavity and the surface area sealed off. In turn, the block would then be immersed in water and as the pulp wood would saterate causing it to expand, the block would split in line with the cut, or perforation. In the near future I will attmept to obtain a few clearer examples of this and forward same on to you. In assembling this material the other night, I regret to say that I was not able to locate a projectal point for you, however, the next couple of weeks will be occupied at an under-water site which usually offers a good number of samples and I will see to it that we put one asside for you and will also forward same in

due course.

That's about it for the moment. You will most probably be hearing again from me in the next month or so.

Best personal regards,

G.F. Wili

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