

However, it does not necessarily follow that a material which was soluble in dissolving silica, and even pyroxene, was accordingly completely lost for chrysotile, and in fact it may have had little or no action on the latter. The writer is inclined to the view that resorption of the fibers did perhaps take place to some extent, especially at their extreme tips adjacent to the fissures (but without of course any actual opening of the latter), the material being redeposited further along in the vein. A repeated recrystallization such as this might go far to explain the extreme delicacy, purity and uniform character of the chrysotile fibers, and also the absence of admixed foreign material from the veins, since all the iron ore, being insoluble, would be left behind and accumulate at the fissure. It might also throw some light on the frequent wavy or uneven nature of this central parting of iron ore (generally regarded as marking the plane of the original fissure), which is somewhat difficult to account for, since, on the above view, a partial, but not uniform, solution of the fiber tips might lead to a shifting or wandering to one side or the other of the original plane of the fissure.

According to the above hypothesis, two conditions must be fulfilled before veins of chrysotile can form. These are:

1. The production of pure serpentine, *i. e.*, the complete serpentinization of all the silicate minerals of the peridotite, or other parent rock, together with the complete removal of all those constituents which are not required for the formation of the serpentine molecule (except perhaps iron ore).
2. The pure serpentine, as it crystallizes, must be under a differential pressure, *i. e.*, subjected to an expansive strain in one direction, which will determine the direction of elongation of the fibers.

The necessity for the first condition will be generally admitted; and yet there must be some other requisite, or chrysotile would be a very much more widespread and common substance than it actually is. The writer believes this is supplied by the second condition above. The expansive strain may perhaps not everywhere result from the same causes; in the present instance it is