6. & the earliest were single furrow swing ploughs that is without any wheel at all. Then came the wheel plough & afterwards the double furrow with handles similar to the single And then later the Lever plough. These very quickly got established where big areas of ground were to be turned over. These required three horses, whereas the single only required two. The implements of ploughs & harrows were mostly made by the general blacksmith but later, there developed the noted, Reid & Gray of Dunedin, P+ & Duncan of Christchurch & also Booth & Mc Donald. These firms later introduced the Disc Harrow & Grain Drills. Previous to the introduction of these latter implements all the various grains were sown broad cast by hand & the ploughed ground harrowed down. In general therefore it was necessary that in the ploughing operations a good clean furrow should be made, & compacted to the previous one so that there should be a good seed

7. bed, allowing for as little as possible of the seed going through between the furrows. With the coming of the seed drill, the ground was prepared first & then the drill put in the seed at uniform depth. Really less seed was required, & better crops resulted. The harvesting operations was a much longer process, because there was no machinery for reaping. The introduction of the reaper and binder for harvesting purposes, was not introduced into our district until the year 1878 & 1879. It may have been in other districts, but I think not, & my father, Mr Cunningham, & Mr Washburn were the first to introduce the Mc Cormick reaper. Previous to that, some of the harvesting at a very early period was done in the old fashioned style, with the sickle, & the scythe. The scythe had an attachment which enabled the cut grain, to be kept together, so as to be easier made into sheaves. It was called a cradle attachment I never saw it in operation, but I can remember the sickle being used, but only in a small way, such as cutting around