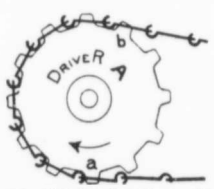

Fig. 4.—Wheel Pitch Smaller than Chain Pitch.

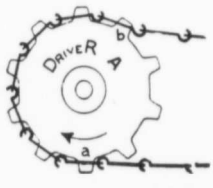

Fig. 5.—Wheel Pitch Larger than Chain Pitch.

action is good, at d it is bad. In this case, therefore, it would seem that the wear would be confined to the driven wheel. This is so in actual practice.

The same wheels with the links running hook first are shown in Fig. 11. The action at a is bad, at b it is good, at c it is bad, but not objectionable, because, as before, there is no tension at this point, and the action at d is good. Thus all the wear would seem to be on the driver as a result of the action at a. This is found to be the case, and theory and practice agree that with the chain links running bar first the driven wheel wears, and with the chain links running hook first the driver wears.

It is found that because the wear at d, running bar first, is caused by the link slipping up the tooth, it tends to undercut and form a hook and thus break the chain. On the other hand, the wear at a, when running hook first, is caused by the link slipping down the tooth, and the wheel will wear out completely without endangering the chain. It has also been proved that the driver, when running the chain links hook first, lasts several times as long as the driven wheel when running the links bar first. As the driven wheel is in nearly every case much larger than the driver, and the consequent wear on each tooth is less, it would seem that if the chain were run so as to wear the driven wheel the wear on the two wheels would be equalized. This would be poor practice, for the reason that the driver, being smaller, is more cheaply replaced and the repair account will therefore be less running the links hook first.

In elevators, Fig. 12, the head wheels act as a driver, the foot wheel simply as an idler, because it is doing no work. Therefore the chain links should be run bar first, so as to favor the driver. On conveyors one wheel is always an idler, comparatively speaking, and the same reasoning holds as for elevators; the chain links should run bar first in all cases.

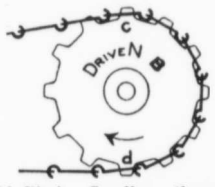

Fig. 6.—Wheel Pitch Smaller than Chain Pitch.

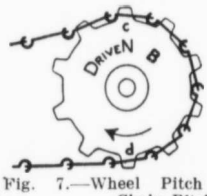

Fig. 7.—Wheel Pitch Larger than Chain Pitch.

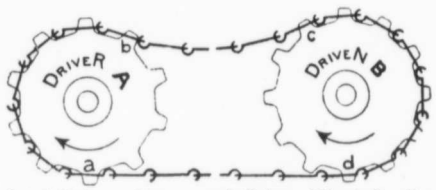

Fig. 8.—Pitch of Driver Larger and Driven Wheel Smaller than Chain Pitch, with the Links Running Bar First.

The foregoing applies equally well to all closed end pin chains; the closed end corresponds to the hook and the pin end to the bar of the Ewart chain. In general, therefore, on drives run hook first, on elevators and conveyors, run bar first.

Plans are being considered for making about 2 miles of extensions to the transmission lines of the municipal electric light plant at Battleford, Sask.

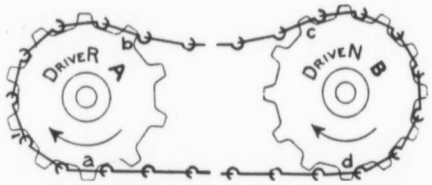

Fig. 9.—Pitch of Driver Larger and Driven Wheel Smaller than Chain Pitch, with the Links Running Hook First.

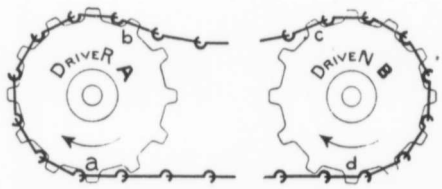

Fig. 10.—Pitch of Both Wheels Smaller than Chain Pitch, with the Links Running Bar First.

The Halton Oil & Gas Co., Limited, Milton, Ont., have been incorporated with a capital of $40,000, to manufacture oil, gas, etc. The provisional directors include A. E. Guidal, G. H. Luxton and S. E. Brandon, Milton, Ont.

The Renfrew Knitting Co., Limited, Renfrew, Ont., have been incorporated with a capital of $50,000, to manufacture knitted and woven goods, etc. The provisional directors include J. G. Barnet, G. B. Ferguson and T. Logan, Renfrew, Ont.

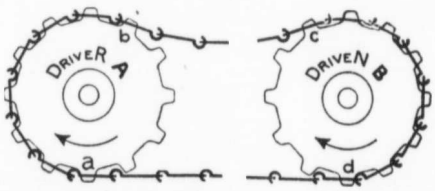

Fig. 11.—Pitch of Both Wheels Smaller Than Chain Pitch, with Links Running Hook First.