

marking the relative strength of the attacking force by corresponding repetition of the fire signals, it is likely that similar devices were practised in Han times. We read elsewhere that General Ma Chêng, when reorganizing the defences of the northern border in 38-43 A.D., placed the fire-signal stations ten Li or about two and a half miles apart; and this accords remarkably with the average distances observed from tower to tower on the earlier Tun-huang *Limes*, due allowance being made for the varying configuration of the ground.

No doubt such a system of optic telegraphy was insufficient to assure the rapid transmission of warnings at all times or for the communication of important particulars. Hence the need for mounted messengers repeatedly mentioned in the records, who by relays of horses kept ready at the stations could cover distances at great speed. The presence of such mounts was in fact attested by the plentiful horse-dung we found at each tower, however confined the accommodation near it. A piece of ancient Chinese poetry which M. Chavannes translates, though referring to a part of the border much farther east, gives so graphic a picture of such a scene that I cannot refrain from quoting it: "Every ten Li a horse starts; every five Li a whip is raised high; a military order of the Protector-General of the Trans-frontier regions has arrived with news that the Huns were besieging Chiu-ch'üan [Su-chou]; but just then the snow-flakes were falling on the hills along which the barrier stretches, and the signal fires could raise no smoke."

To keep watch and guard by the towers and the wall, or 'to mount the barrier' as the ancient Chinese expression has it, did not exhaust the duties of the men posted at these stations. Numerous wooden records tell us of the varied fatigue labours demanded from them. Men were ordered out to work on the construction of defences, a task which along this westernmost *Limes* must have included the preparation of the fascines forming the main materials; to collect fuel for the signal fires, not an easy matter where the towers happened to be miles away from the scrub-filled depressions. At several stations we have also reckonings