

Rashiduddin also mentions the siege of Siangyang, as we learn from D'Ohsson. He states that as there were in China none of the *Manjaniks* or Mangonels called *Kumghá*, the Kaan caused a certain engineer to be sent from Damascus or Balbek, and the three sons of this person, Abubakr, Ibrahim, and Mahomed, with their workmen, constructed seven great Manjaniks which were employed against SAYANFU, a frontier fortress and bulwark of Manzi.

We thus see that three different notices of the siege of Siang-yang, Chinese, Persian, and Venetian, all concur as to the employment of foreign engineers from the West, but all differ as to the individuals.

We have seen that one of the MSS. makes Polo assert that till this event the Mongols and Chinese were totally ignorant of mangonels and trebuchets. This, however, is quite untrue; and it is not very easy to reconcile even the statement, implied in all versions of the story, that mangonels of considerable power were unknown in the far East, with other circumstances related in Mongol history.

The Persian History called *Tabakát-i-Násiri* speaks of Aikah Nowin the *Manjaniki Khás* or Engineer-in-Chief to Chinghiz Khan, and his corps of ten thousand *Manjanikis* or Mangonellers. The Chinese histories used by Gaubil also speak of these artillery battalions of Chinghiz. At the siege of Kai-fung fu near the Hwang-Ho, the latest capital of the Kin Emperors, in 1232, the Mongol General, Subutai, threw from his engines great quarters of millstones which smashed the battlements and watch-towers on the ramparts, and even the great timbers of houses in the city. In 1236 we find the Chinese garrison of Chinchau (*I-chin-hien* on the Great Kiang near the Great Canal) repelling the Mongol attack, partly by means of their stone shot. When Hulaku was about to march against Persia (1253), his brother, the Great Kaan Mangku, sent to *Cathay* to fetch thence 1000 families of mangonellers, naphtha-shooters, and arblasters. Some of the crossbows used by these latter had a range, we are told, of 2500 paces! European history bears some similar evidence. One of the Tartar characteristics reported by a fugitive Russian Archbishop, in Matt. Paris (p. 570 under 1244), is: "*Machinas habent multiplices, recte et fortiter jacentes.*"

It is evident, therefore, that the Mongols and Chinese *had* engines of war, but that they were deficient in some advantage possessed by those of the Western nations. Rashiduddin's expression as to their having no *Kumghá* mangonels, seems to be unexplained. Is it perhaps an error for *Karábughá*, the name given by the Turks and Arabs to a kind of great mangonel? This was known also in Europe as Carabaga, Calabria, etc. It is mentioned under the former name by Marino Sanudo, and under the latter, with other quaintly-named engines, by William of Tudela, as used by Simon de Montfort the Elder against the Albigenses:—

"E dressa sos *Calabres*, et foi *Mal Vezina*
E sas outras pereiras, e *Dona*, e *Reina*;
Pessia les autz murs e la sala peirina."*

("He set up his *Calábbers*, and likewise his *Ill-Neighbours*,
With many a more machine, this the *Lady*, that the *Queen*,
And breached the lofty walls, and smashed the stately Halls.")

Now, in looking at the Chinese representations of their ancient mangonels, which are evidently genuine, and of which I have given some specimens (figs. 1, 2, 3), I see none worked by the counterpoise; all (and there are six or seven different representations in the work from which these are taken) are shown as worked by man-ropes. Hence, probably, the improvement brought from the West was essentially the use of the counterpoised lever. And, after I had come to this conclusion, I found it to be the view of Captain Favé. (See *Du Feu Grégeois*, by MM. Reinaud and Favé, p. 193.)

In Ramusio the two Polos propose to Kúblái to make "*mangani al modo di*

* Shaw, *Dresses and Decorations of the Middle Ages*, vol. i. No. 21.