The Vitus Bering first voyage maps.

By L. Bagrow.*)

As in 1648 Semen Dezhnev starting his journey by sea from the estuary of the river Lena eastwards doubled Cape Chukotski and entered the mouth of the river Anadyr, it became evident that Asia and America were not connected in the north-east if not somewhere much farther north, under the pole, America extended her spurs in a westerly direction and joined Asia west of the Lena. But little was known of the results achieved by the sea-faring Dezhnev, especially abroad. Even Leibniz knew nothing about this when in 1697 he wrote a note of report about the necessity of undertaking explorations in Russia. He gave this note to a Russian embassy headed by Lefort which happened to pass through Hannover. Amongst other things Leibniz recommended that explorations of the northeastern coast of Asia should be undertaken to find out whether Asia and America were connected or separated from one another by straits. Leibniz repeatedly raised this question which he discussed personally with Czar Peter when they met in Pyrmont in 1716. Peter was in no hurry about this question as he undoubtedly knew about the results of Dezhnev's travels in 1648. He also knew that Asia was separated from America as represented on a map from 1699 which had been sent to Moscow by Atlasov. This map was afterwards, with some alterations by I. L'vov, together with a map of the Caspian Sea from 1721 offered by Peter to the Paris Academy of Science and published by Homann on one sheet together with the Caspian Sea map. In 1719 it was decided to send to north-eastern Siberia a small secret expedition for which were chosen the especially experienced navigators Fedor Luzhin and Ivan Yevreinov. From the Czar himself they received secret instruc-

^{*)} Russian manuscript translated into English by Chr. Hellstern-Nielsen.

tions to explore the Kuriles and, if possible, Japan, and furthermore "to describe if America was connected with Asia, which should be done most carefully not only south and north but also east and west and to put everything down on the map most exactly". But the expedition proved a failure because it lost all anchors, and Yevreinov did not succeed in pushing on north. The ill fate of Yevreinov and Luzhin's expedition caused Peter to organize a new



expedition and entrust it to more experienced sailor. He charged the count Apraksin with all arrangements for at fresh expedition, particularly with the selection of competent men. Apraksin presented a list of officers suitable for this expedition and as chief of the expedition he suggested to chose between the captain Bering "because he had been to the East Indies" and van Verden who had served as a skipper. The latter was already experienced as a commander on the Caspian Sea and had drawn a map of this sea. Peter's choice fell on Bering.¹)

In his own handwriting Peter gave him the following instructions:2)

¹⁾ On account of the bicentenary of his death many books and articles appeared about him. The most important are: M. Erichsen: Vitus Bering og hans rejser. Nordisk Tidsskrift. N. S. 17. 1941. p. 534—550. J. Petersen: Søfareren Vitus Bering. København 1941. E. Stensgård: Den danske Søfarer og Opdagelsesrejsende Vitus Bering, 1681—1741, i Dansk Litteratur og Presse. Horsens 1941.

²⁾ In Danish translation in the article by Erichsen in Nordisk Tidsskrift.

- I. In Kamchatka or another place thereabout to be constructed one or two ships provided with decks.
- II. Sail on those ships towards the north along the land which must be supposed to be part of America as its end is unknown.
- III. Investigate, therefore, where this land joins America, sail to some European colony or other or, if you come across some European vessel, inquire about the name of the coast and note it. Go ashore yourself and get reliable information and put it down on the map and then return home.

Peter did not live to see the results of this expedition. He was already ill and laying in bed when he wrote the instructions and three weeks later he was no more. To the staff of this so-called first Kamchatka-expedition belonged besides captain Vitus Bering—its chief—and the lieutenants Alexei Chirikov and Martin Spanberg, the midshipman Peter Chaplin, the geodesists Grigorij Putilov and Fedor Luzhin, skippers, sailors, and others. In addition the friar Ignatij, formerly Ivan Kozyrevski, who had previously been with an expedition to Kamchatka and the Kuriles was ordered to take part in the expedition.³)

From the moment the expedition left Petersburg, on January 24th 1725, and to day of its return to Petersburg, on the first of March 1730, Chaplin kept a diary of his journey.⁴)

The geodesist Luzhin, member of the expedition, died already on the way through Siberia, and the other geodisist Putilov fell ill and was left behind in Kamchatka. The expedition thus put to sea without geodesists, and all cartographical work had to be done by the sailors. It was not until July 1728 that the ship "Saint Gabriel" was completed and put to sea from the Kamchatka river. On the 15th of August it reached 67° 18' northern latitude. Bering

³⁾ For details about all these expeditions see L. S. Berg: The discovery of Kamchatka and the Berings expedition. Leningrad 1935 (Russ.); F. A. Golder: Bering's Voyages. American Geogr. Soc. Research Ser. 1. v. I, N. Y. 1922.

⁴⁾ This diary was published by V. Vakhtin in his: Russian Sea-explorers, Petersburg 1890 (Russ.). Here are also to be found notes from Chirikov's journal written during a seperate journey and Bering's report. An abbreviated version of Chaplin's diary is given by V. Berg in his "First voyage of the Russians" (Russ.), Petersburg 1823, from which it was reprinted in English by W. H. Dall: Notes of an original manuscript chart of Bering's expedition of 1725—30. U. S. Coast and Geodetic Survey, Appendix no. 19, Washington 1891. Bering's report in English language is presented by W. H. Dall: A critical review of Bering's first expedition. The Nat. Geogr. Magazine. Washington v. II, 1891, p. 111—169.

describes this moment in the following words: "On August 15th we arrived at 67 degrees and 18 minutes northern latitude. I decided that to all appearance and according to His Imperial Majesty's instructions our task had been carried out and that the land did not extend farther north and no land joined neither the Chukotski nor the eastern corner, and I returned".

Bering saw neither the American coast nor the turning of Asia westward. On his return in Petersburg in March 1730 he presented to the Empress, beside brief report, a map. On the map is recorded not only Kamchatka and the north-eastern corner of Asia but the entire route beginning at Tobolsk. Some manuscript copies of the maps from Bering's first expedition have been preserved up to our days:

- 1. Topografical map from Tobolsk to the Okhotski fort (drawn in 1725 and 1726 during captain Bering's journey in Siberia) with notes indicating where aberrations of the compass were observed in towns and in other places. On the same map are indicated the settlements of the Ostyaks, the Tunguzes, and other peoples. This map is in the Headarchives in Moscow.⁵)
- 2. Map drawn in 1732 by captain-commander Bering with indications of places through which he passed from Tobolsk to Kamchatka. Drawn during the Siberian expedition.⁶)
- 3. Bering's map drawn by P. Chaplin and then redrawn by the geodesist Ivan Khanykov. This map is in the Cartographical Archives of the Academy of Science in Leningrad.⁷)
- 4. "Siya karta sochinisya v sibirskoj expedici pri kamande ot flota kapitana Beringa ot Tobolska do Chyukockago ugla" [= This map was drawn in the Siberian expedition under command of seacaptain Bering from Tobolsk to the Chukotski corner]. Is in the Kgl. Biblioteket in Stockholm, 1350×580.8).

⁵⁾ Büler: Moscow Headarchives' Library, Foreign Office, Index of geographical atlases, maps, plans, and theatres of war. Izv. Imp. Russ. Geograph. Obshch., Petersburg, volume XIII, 1877, p. 52 no. 32 (Russ.).

⁶⁾ Under this title this map is included in the same catalogue of the Moscow Headarchives, p. 52, no. 33.

⁷⁾ L. Berg has a poor reproduction of it: The discovery of Kamchatka. 1935, fig. no. 25. A French copy of it is mentioned below under no. 8.

⁸⁾ A photographic copy of it is shown in A. E. Nordenskiöld: Contribution to the early cartography of America 1892. A reproduction of this photograh is given in L. Bagrow: Maps of Asiatic Russia. Petersburg 1914 (Russ.) and in C. Björkbom: Two Bering maps in the Royal Library at Stockholm. Ethnos. 1941. p. 128-132.

- 5. "Sÿa Charta Sotzÿnÿsia Wsÿbÿrskoÿ Expedÿtzÿ Prÿ Camandie åt Flotta Capÿtana Berÿnga åt Tobolska då Tziokotzkago." 1932×545. Also this map is in the Kgl. Biblioteket in Stockholm. C. Björkbom also refers to this map in his above-mentioned article.9)
- 6. "Sÿa Charta Sotzÿnÿsia Wsÿbÿrskoÿ Expedÿtzÿ Prÿ Comandie åt Flotta Capÿtana Beringa åt Tobolska då Tzjokotzkago. Denne Charta är förfärdigad under Seberjska Expedition af den wjd flottan comanderande Capitainen Bering, ifrån Tobolski till Tziokotzkago." 1313×510. The map is in the Krigsarkivet in Stockholm (33. 36. b.). It is identical with the preceding map in the Kgl. Bibliotek in Stockholm.
- 7. "Geografisk charta ifrån Tobolskoj till Tzjokotzkago förfärdigad Under Den Siberiske Expedition af Den Wid Flottan Commenderande Capitainen." 1305×512. This map is in the private collection of baron Klinkowström at Stavsund near Stockholm. 10)
- 8. "Cette carte est faite sur le voyage que le Sieur Bering, capitaine de la flotte Russienne a fait de la ville de Tobolskoy en Sybérie jusqu'à Tziokoskago avec les gens qui étoint commandés avec luy, l'an 1725." 1330×570. In the Bibliothèque Nationale, Paris. This copy was received in 1733 in Stockholm by the French envoy, count de Casteja, together with a translation from Swedish of Bering's report. This translation is also in the Bibliothèque Nationale now.¹¹)
- 9. "Cette carte est faite sur le voyage que le Sieur Bergings, capitaine de la flotte Russienne a fait de la ville de Tobolski en Siberia jusqu'à Tziokotskago avec les gens qu'il commandoit l'an 1725 des-

⁹⁾ E. I. Dahlgren has previously referred to both af these maps in a brief note in Ymer 1884 p. 93.

¹⁰⁾ The map is described in W. H. Dall: Early expeditions to the region of Bering Sea and Straits. United States Coast and geodetic Survey, Appendix no. 19, Report for 1890. Washington 1891. A reproduction of this map in Swedish language with an English translation by Dall is also given in the same article.

¹¹⁾ A. Isnard: Joseph-Nicolas Delisle, sa biographie et sa collection de cartes géographiques à la Bibliothèque Nationale. Comité de Trav. hist. et scient. Bull. d. 1. Sect. de Géographie, T. XXX 1915, Paris, p. 120, no. 166 bis et ter. To the map is pasted a "Note ajoutée en 1759". A copy of this map is in the same lirbary in the Klaproth collection and is described in G. Cohen: Les cartes de la Sibérie au XVIII-ème Siècle. Nouvelles Archives des Missions scient., fasc. 1 nouv. sér., Paris 1911, p. 191—193. There is a reduced copy of it in the Delisle collection, Isnard (1. c. no. 166) attributes this copy to the geodesists A. Zinovyev and I. Alyabyev. Two pages of text explaining the figures as well as the abbreviations marked on the map are appended to it.

signé à Stockholm par le chevalier de Saumery l'an 1733." 1319×533. The map is in the Krigsarkivet in Stockholm (33. 36. a.). It seems to be a copy of the preceding map in the Bibliothèque Nationale in Paris. It was mentioned for the first time by captain H. Köhlin who gives a reproduction of its eastern half. 12)

- 10. "Accurate Delineation des Oberhalb Siberiens ney gefundenen und Entdeckten Landes, Kamtschatka genannt, sambt deme was noch weiter daran gräntzet. A. R. Witken." 740×435. In the Kgl. Bibliotek, Copenhagen. The only one of all the copies drawn on conical projection.
- 11. "Carte de la Partie Occidentale de la Route du Capitaine Beerings de Tobolsk à la partie orientale de la Russie nouvellement découverte. Le cours de la Rivière d'Angara jusqu'au Lac Baikal et le Lac Baikal, la Ville d'Irkoutsk et tout ce canton est marqué tiré de la Carte du Géodésiste Chatilova. Aux sources de l'Irtis de l'Oby et du Iéniscée il est marqué les mêmes géodésistes que lans la petite carte des quels ces cantons son tirés. Cette carte et marquée copiée de dessus la carta du Capne Beerings et de Pierre Tchaplin par le Géodésiste Iean Khanikof." 1300×540. This map is also in the Delisle collection and the title is written in Delisles own hand. 13)
- 12. "Diese Charte über Sibirien nimt ihren Anfang zu Tobolske ostwerts bis an die euserste Grentze von Sukotskij gemaest unter dem Commendo des Capt. Comandeurs Bering Anno 1729." The map is in British Museum in London.

In 1748 the Academy compiled and printed a "List of maps, designs and plans of the Russian Empire kept in the Geographical Department of the Imperial Academy of Science" (Russ.), and in this list are mentioned two maps:

- The first voyage of captain Bering from Tobolsk to Okhotsk
 in French.
- Copy of a map showing routes by land and by sea from Tobolsk to Kamchatka, by the midshipman Chaplin under command of captain Beering — in Russian.

As the greater part of the maps mentioned in this List were in the Moscow Headarchives one must presume that also the latter two maps are to be found in the same collection. The catalogue of the archives is compiled very superficially and it is not always easy

¹²⁾ Vitus Bering — ett 200-års-minne. Svenska Dagbladet, 19. December 1941.

¹³⁾ Isnard, 1. c. no. 167. This map is also brifely described by G. Cohen.

to establish the identity of the maps referred to in the various sources. Perhaps the second of the latter maps would turn out to be exactly the one I presented above under no. 3, namely the one now in the archieves of the Academy of Science. Anyhow, enough copies of Bering's maps seem to have been made, and although the results of this expedition were supposed to be held secret the great number of its participants of whom many were foreigners made it difficult to keep all this secret. One of those manuscript copies got into the hands of the King of Poland who passed it on to du Halde, and the latter engraved it and inserted it together with Bering's report into his "Déscription géographique, historique, chronologique, politique et physique de l'Empire de la Chine et de la Tartarie chinoise". v. IV, Paris, 1735 as "Carte des Pays, traversés par le cap. Beerings depuis la Ville de Tobolsk jusqu'à Kamtschatka 1732". This map also served as a supplement to "Atlas général de la Chine, de la Tartarie chinoise et du Tibet" par M. d'Anville, la Haye 1737, the latter having engraved the map after maps made by the Jesuits under the emperor Khang-Hsi. Here Bering's map is presented without indication of date or name, with the signature: "G. Kondet fecit et scrip." 532×234. Of this map was in its turn made a somewhat reduced copy in English which was inserted in J. Harris: Navigantium atque itinerarium Bibliotheca. London 1748 v. 2, p. 1016.

As far as the origin of the Paris copies of Bering's maps is concerned all is clear: they were copied and smuggled to Paris by Delisle. This was prohibited and he was suspected of secretly sending copies of Russian maps over the frontier. He was even arrested but no proof was ever produced. But what he had succeeded in sending to Paris created the basis to his collection which later passed on to the Bibliothèque Nationale in Paris. Later on Klaproth took copies of many of these maps and his collection eventually ended in the same library. Bering once told Delisle that his map did not quite agree with his journal, so that Delisle, when he later began the drawing up of his map of all Russia, asked for Bering's map referred to that Bering's maps were actually drawn accordingly. There is a note by Delisle on one of the copies of Berng's map referred to that Bering's maps were actually drawn by Chaplin and that for drawing the section from Tobolsk to the sources of Irtysh a map by the geodisist Putilov had been used; the sources of Ob and Yenisej, the estuary of Yenisej and the northern shores were taken from the map of the geodesist Chi-

chagov, but all the rest was according to Bering's personal notes. 14) On some of the maps presented it is furthermore indicated that some of the coastlines are taken from earlier maps and reports, for instance the coast from Kolyma to Shelagski and from Shelagski to Chukotski promontories as well as the northern and western shores of the Okhotsk Sea. It must be emphasized that Bering's longitudes are very near the real ones. Even if there are some differences in the configuration of the coastline, the general longitudes are rather exact, especially the coast from Cape Dezhnev to Chukotski and the eastern coast of Kamchatka river. However, Kamchatka proper is too broad and her westcoast is for this reason moved 1-1/2° west. All that is taken from old maps differs from the actual state of things. Especially the Shelagski promontory has been placed so far north that in reality even the Wrangel island lies south of it. The northern coastline of the Okhotsk Sea is on the contrary placed 1°-2° more southerly. It would be interesting to compare all Bering's maps left to us. Unfortunately, all those kept in the Soviet Union are so far absolutely inaccessible to foreign scientists. All inquiries about those maps and requests for photographic copies remained without reply.

Comparing the five copies of this map in Swedish possession it seems possible to establish the existence of two groups. With the first group are to be classed nos. 4 and 9, with the second group nos. 5, 6 and 7. The distinction between the two groups lies principially in the fact that the second group has indications to the aberration of the compass noted along the eastern coast of Kamchatka and south of the Chukotski peninsula. It is true that on the map no. 9 which I have classed with the first group, a large compass-rose showing the aberration of the magnetic north is repeated by the eastcoast of Kamchatka, but this indication is not so conspicuous as the illustrations showing the aberration on the maps of the second group. However, map no. 4 -- in Russian -has no compass-rose at all but only compass-rose lines. The latter two maps, namely the maps belonging to the first group, differ from the others by their artistic execution: on the Russian map (no. 4) there are drawn some types of Siberian peoples, and the French copy (no. 9) is covered with forest. This French copy is,

¹⁴) In the archives of the Admirality in Leningrad there are amongst Bering's papers also other traveller's maps, for instance Spanberg's route from Yudoma to Okhotsk — see a reproduction in F. A. Golder: Bering's voyages. Amer. Soc. Research Ser. no. 1, N. Y. 1922, fig. 4.

however, not taken specially from the preceding Russian copy: the translation was made from another text with more abundant details. Bering's map presented by d'Anville in his "Nouvel Atlas de la Chine", resembles in appearance mostly map. no. 4 but without the pictures of peoples decorating it.













