I.B

DIGRESSIONS AROUND A MEDAL — 1804 - FRANCE

I bought the medal because it was ingeniously attractive: a good portrait of Napoleon "empereur et roi" on the one face, and on the other a robust Aesculapius with the staff and the snake, holding a naked Venus with a protective arm, a pathetic little cow on the left and on the right a "stylet" and an ampoule containing presumably "la vaccine". But why the date MDCCCIV? What happened in that year to justify the striking of the medal?

Finding out led me to go through a number of old books - the history of smallpox, variolation, vaccination... As everybody knows, it was an old practice in the East, from China to Turkey, to inoculate smallpox putting material from the pustule on a sick person onto the skin of a healthy one, because it had been observed that the smallpox thus produced in the recipient was less severe and protected him for life against the risk of disfigurement or death, which occurred in almost 60-70% of natural infections. After all, as late as 1950, I saw in Iran the same method being followed for the protection from disfigurement of the face caused by another disease, cutaneous leishmaniasis or tropical sore, by causing the infection through inoculation in a part of the body other than the face, where the natural sore normally occurs. The "variolization" - this is what the artificial infection with smallpox virus is called - was introduced in England in 1721 by Lady Montague, wife of the British ambassador to the Court of Constantinople, and met with great success. The procedure was not without risk, one to two per cent of the variolated persons dying as a result of the infection, but this risk was far inferior to that of the natural disease which, according to the bills of health of the City of London from 1700 to 1800, caused every year between 5 and 13% of deaths from all causes. In France, in 1754, one in every ten deaths was due to this infection and one out of four persons was either killed by it or disfigured for life. However, the people who were"variolated" became a source of natural infection for others. The individual protection was thus a threat to society. As there was nothing better, variolization was rapidly and widely accepted in medical circles, even though, for patriotic reasons, some objected in France to the introduction of a method that in Europe had first been developed in England. I was delighted to find during my search the following poem by Voltaire addressed to Dr Tronchin and to the Duke of Orléans on the occasion of the variolization of the Duke's child by Tronchin in 1756.

Il est des préjugés tuiles,
Il en est de bien dangereux;
Il fallait, pour triompher d'eux,
Un père, un héros courageux,
Secondé de vos mains habiles.
Autrefois à ma nation
J'osai parler dans mon jeune âge
De cette inoculation
Dont, grâce à vous, on fait usage.
On la traita de vision;
On la reçut avec outrage,
Tout ainsi que l'attraction.
J'étais un trop faible interprète
De ce vrai qu'on prit pour erreur,
Et, je n'ai jamais eu l'honneur,
De passer chez moi pour prophète.

Comment recevoir, disait-on,
Des vérités de l'Angleterre !
Peut-il se trouver rien de bon
Chez des gens qui nous font la guerre !
Français, il fallait consulter
Ces Anglais qu'il vous faut combattre:
Rougit-on de les imiter,
Quand on a si bien su les battre ?
Egalement à tous les yeux
Le dieu du jour doit sa carrière;
La vérité doit sa lumière
A tous les temps, à tous les lieux.
Recevons sa clarté chérie,
Et, sans songer quelle est la main
Qui la présente au genre humain,
Que l'univers soit sa patrie.

All this was, of course, long before the facts that justified the striking of my medal. It was only in 1796 that Jenner made his first observation on the nature of the cowpox lesions he saw on the hands of a milkmaid in Gloucestershire. He inoculated the pus from one of the pustules into the arm of young James Phipps which gave rise to the benign local development of a cowpox infection, that disappeared within a couple of weeks. A little over one year afterwards, he inoculated the same boy with pus from a smallpox case, and the disease did not develop. In 1798, Jenner published his famous privately printed pamphlet "An inquiry into the cause and effect of Variolae Vaccinae".

The basis for the final solution of the smallpox problem was there, and this time without risk either to the person or to the community. Clearly, Napoleon, anxious for the health of his people and above all of his soldiers, could not remain indifferent to this great discovery which, interestingly enough, broke through a number of political barriers of the day. The Duke de la Rochefoucauld-Liancourt, who had taken refuge in England from the French revolution, came back to France in 1800 and became an apostle of the English discovery, the result of which he had witnessed. It is from Paris that the method of vaccination spread to Rotterdam, Genoa, Baunswick, Kiel, Berlin, Madrid, Sweden,... through doctors who had come to see the effect of the vaccine in Paris; and from Spain, through dom Balmis, surgeon to King Charles IV of Spain, it spread to the Canaries, the Antilles, Mexico and Guatemela, South America, Philippines and China. For those long distances, the only way of

keeping the vaccine alive and effective was to embark on a boat a number of children sufficient to permit a number of successive vaccinations by contact from one child as soon as cowpox developed to the next child, so that on arrival there would be a boy with an active cowpox pustule for use in the country of destination for spreading the vaccine. 22 children were required for taking the vaccine from Corunna (Spain) to South America, and 26 more to carry it from there to the Philippines and China. In France, a special Hospice for the Inoculation of Vaccine was inaugurated on 7 February 1801 by Frochot, Prefect of the Seine Department; and Chaptal, Minister of Internal Affairs, gave instructions to the Prefects for the execution of the Imperial Decrees of 4 April 1804 on the Vaccine. The following year, the Emperor ordered the vaccination of all his soldiers. So, here we have the explanation of the medal, which must have been struck to mark the orders of 1804 - for the general population, rather than those of the following year for the soldiers, since if the latter had been the case, Aesculapius would not have wound his protective arm around the souple shoulders of Venus, but around the muscular ones of Mars.

However, we should not forget the situation between France and England at that time, and the last digression I would bother you with, to match the poem by Voltaire, is the letter written by Jenner himself to Napoleon in 1813, at a crucial moment of the blockade of Europe:

Sire,

My Relation Mr Milman, Captain of Infantry in the service of His Britannic Majesty, is detained as a Prisoner of War at Verdun. May I presume to implore your Majesty to grant him the great favour of being permitted to return to England? Vaccination, of which I have been the fortunate Discoverer, and for which Invention I have lately been pronounc'd by your Minister one of the greatest Benefactors of Mankind, has been practic'd no less to the great increase of the population of your Empire than to the preservation of the valuable life of your Son, the Heir to it.

I humbly presume, Sire, on these considerations to solicit the liberty of one Individual, whose restoration to his Family by your Majesty's indulgence will be deem'd a favour which no Time will efface from the memory of

Sire ·

Your Majesty's
most obedient
and
most humble
Servant

EDWARD JENNER

Berkeley
Gloucestershire
Decembr 11th 1813

The Emperor acquiesced.

(Dr G. Gramiccia)

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