

A dissertation on artificial teeth in general: exposing the defects and injurious consequences of all teeth made of animal substances ... The superior advantages of teeth made of a mineral composition are fully demonstrated / [Nicolas Dubois de Chémant].

Contributors

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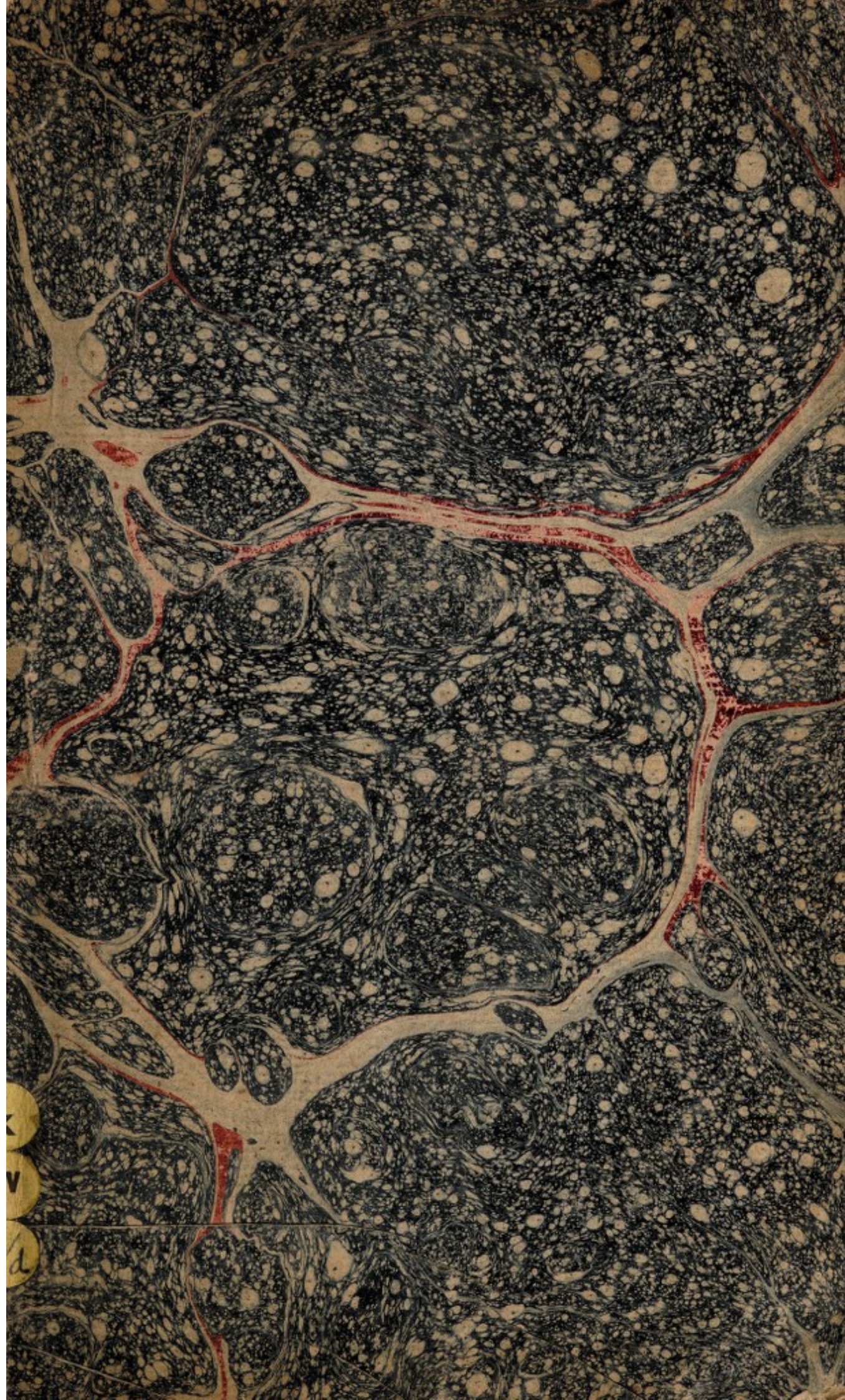
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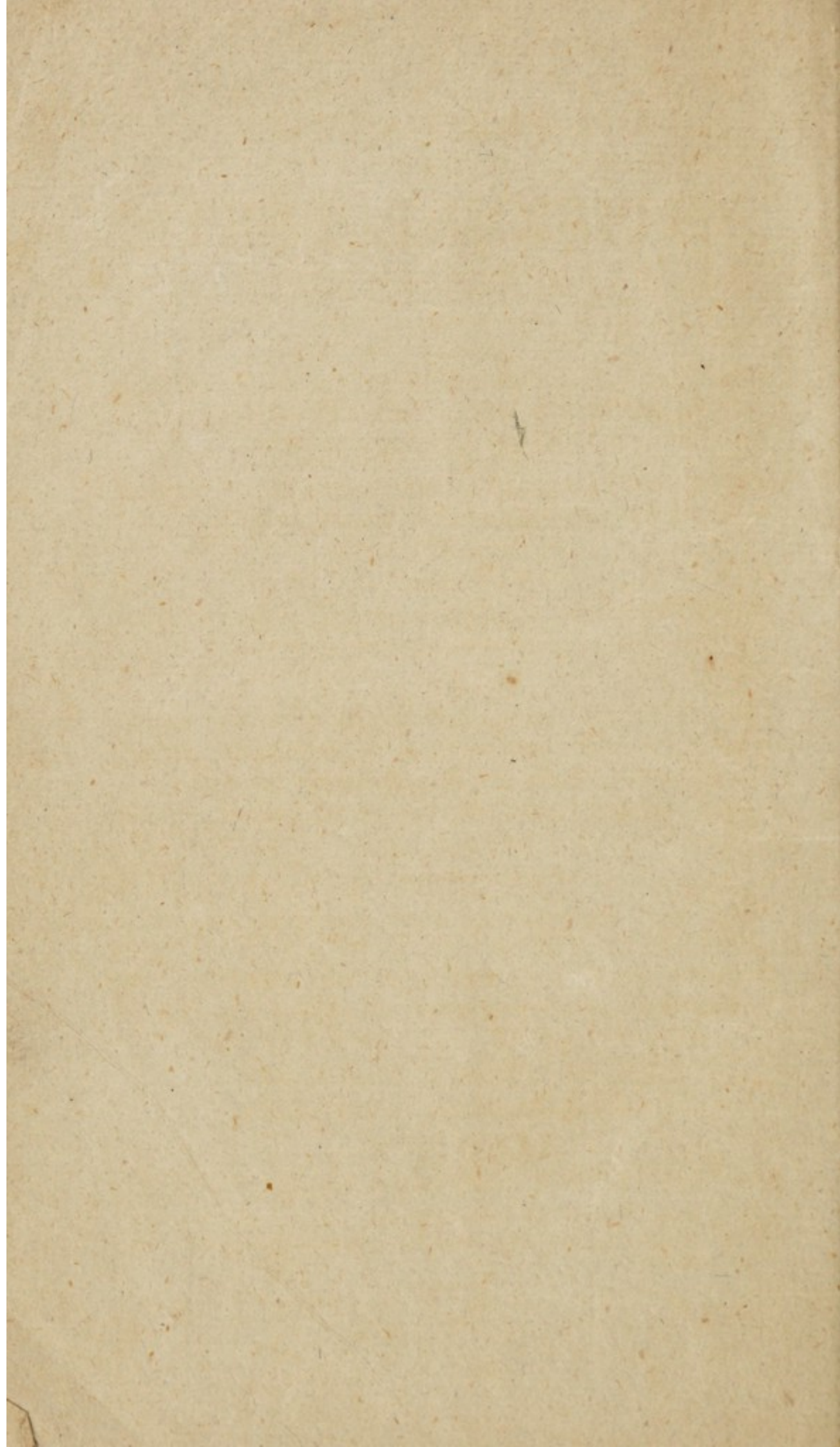
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A
DISSERTATION
ON
ARTIFICIAL TEETH
IN GENERAL.

EXPOSING THE
DEFECTS AND INJURIOUS CONSEQUENCES OF ALL TEETH MADE OF
ANIMAL SUBSTANCES,

THE CORRUPTIBILITY AND DANGERS OF WHICH
ARE AT PRESENT ACKNOWLEDGED
BY THE FACULTY;

THE SUPERIOR
Advantages of Teeth made of a Mineral and Incorruptible Composition are fully demonstrated, approved, and recommended

BY
THE FACULTY AND ROYAL SOCIETY OF MEDICINE, BY THE ACADEMIES OF SCIENCES AND SURGERY, AND BY MANY EMINENT PHYSICIANS AND SURGEONS IN PARIS, LONDON, &c.

By M. DUBOIS DE CHEMANT,
SURGEON OF PARIS, RESIDING AT PRESENT IN LONDON, AND INVENTOR OF THOSE TEETH, FOR WHICH HE HAS OBTAINED HIS MAJESTY'S ROYAL LETTERS PATENT.

LONDON:

Printed by J. BARKER, RUSSELL-COURT, DRURY-LANE.

And may be had of the AUTHOR, No. 1, Frith-street, Soho; and of A. DULAU and Co. Booksellers, No. 107, Wardour-street.

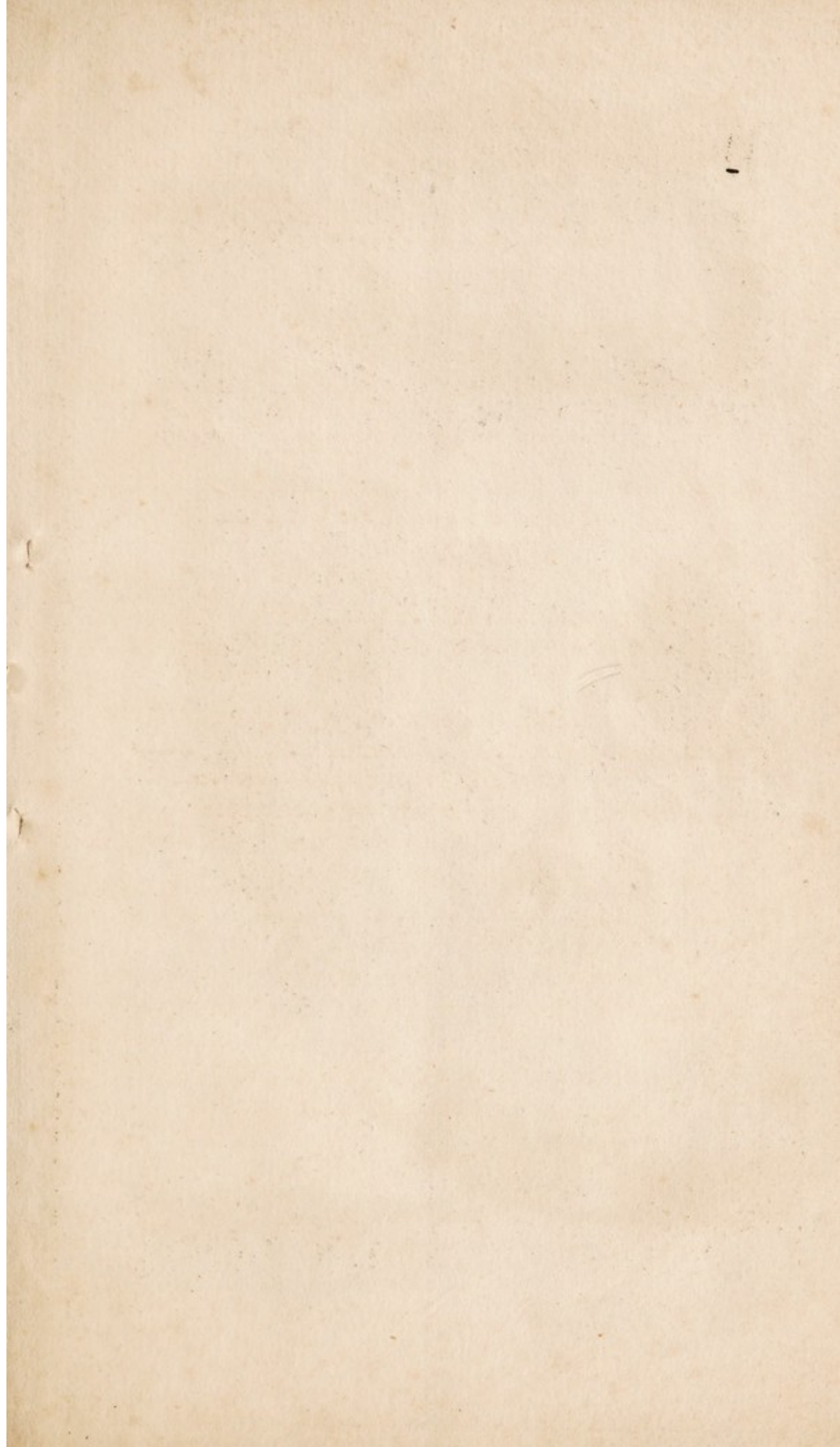
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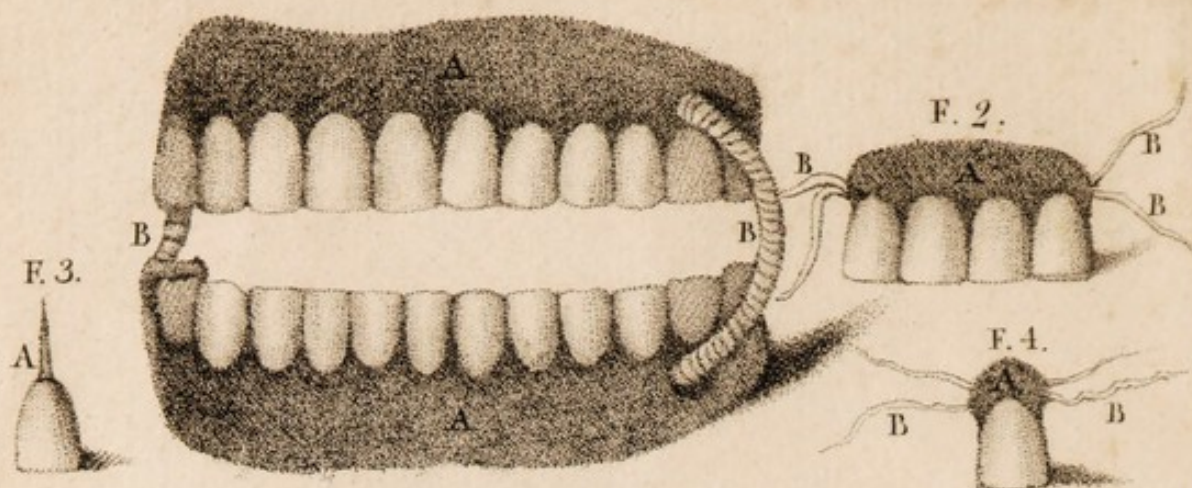
EXPLANATION OF THE TWO PLATES.

Represents:

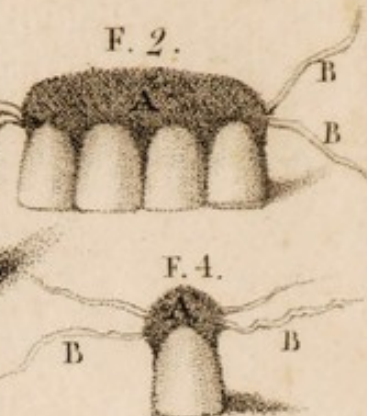
- Fig. 1. A compleat set of teeth. A, the gums—B, the gold springs.
- Fig. 2. Four teeth. A, the gums—B, the thread by which they are fastened.
- Fig. 3. A tooth with a pivot, and without gums. A, the pivot by which it is fixed to the root.
- Fig. 4. A tooth with gums. A, the gum—B, the thread which fastens it.
- Fig. 5. A palate and two teeth. A, the gums, and part of the vomer—B, a gold band, the ends of which form two branches like hooks, by which it is fastened to the natural teeth.
- Fig. 6. A tooth with gums. A, the gums—B, a gold band somewhat bent, by which it is fastened at the inside of the natural teeth.
- Fig. 7. A palate, with the veil of the palate. A, the flaps of the veil of the palate—B, the hinges which join them to the middle part, by which they may be opened or shut at pleasure, by means of a key which moves a small gold band fixed to a pivot—C, the palate—D, the bands by which it is fixed to the natural teeth.
- Fig. 8. Two teeth with gums. A, the gums—B, the thread by which they are fixed to the natural teeth.
- Fig. 9. Part of an under set of teeth made of three pieces, joined together by a gold band. A, the gums—C, the gold band.
- Fig. 10. Seven teeth. A, the gums—B, two gold bands like hooks, by which they are fixed.
- Fig. 11. A nose. A, the nose—B, the steel spring which passes behind the nape.
- Fig. 12. A mouth, of which the under lip, the teeth, and chin, are artificial, and all of a piece.
- Fig. 13. A large palate with nine teeth. A, the gums, and the part of the vomer which separates the nostrils—B, the gold bands by which it is fixed to the natural teeth.
- Fig. 14. Ten teeth, with a small part of the gums, fixed by two gold pivots.
- Fig. 15. A set of under teeth. A, the gums—B, two gashes where the gold bands are placed, to which it is fixed.
- Fig. 16. A compleat set of upper teeth, kept up by a gold mechanism, fixed on the natural teeth of the under jaw-bone. A, the gums—B, the gold springs—C and D, the mechanism.



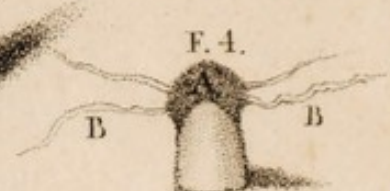
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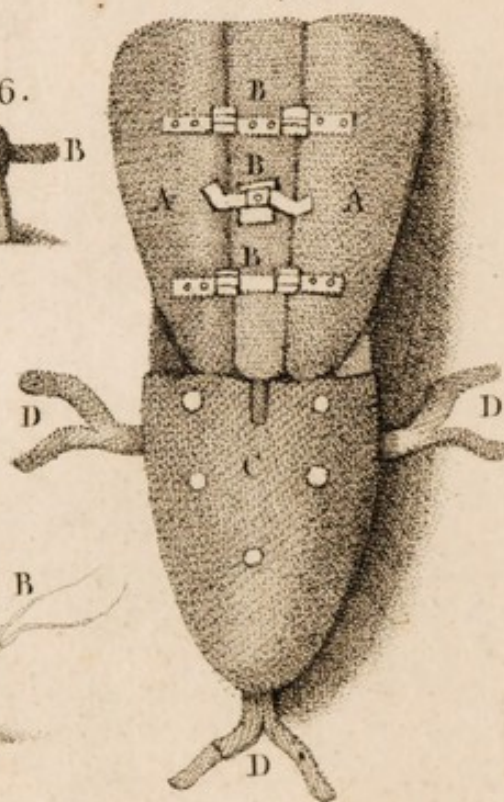
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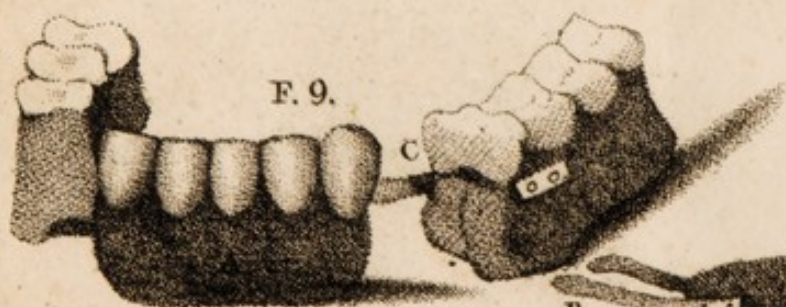
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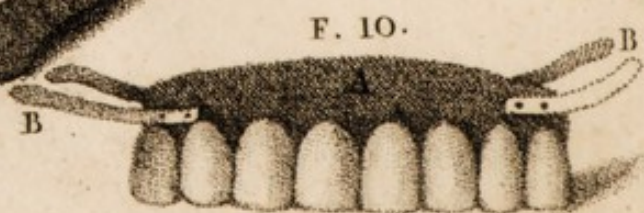
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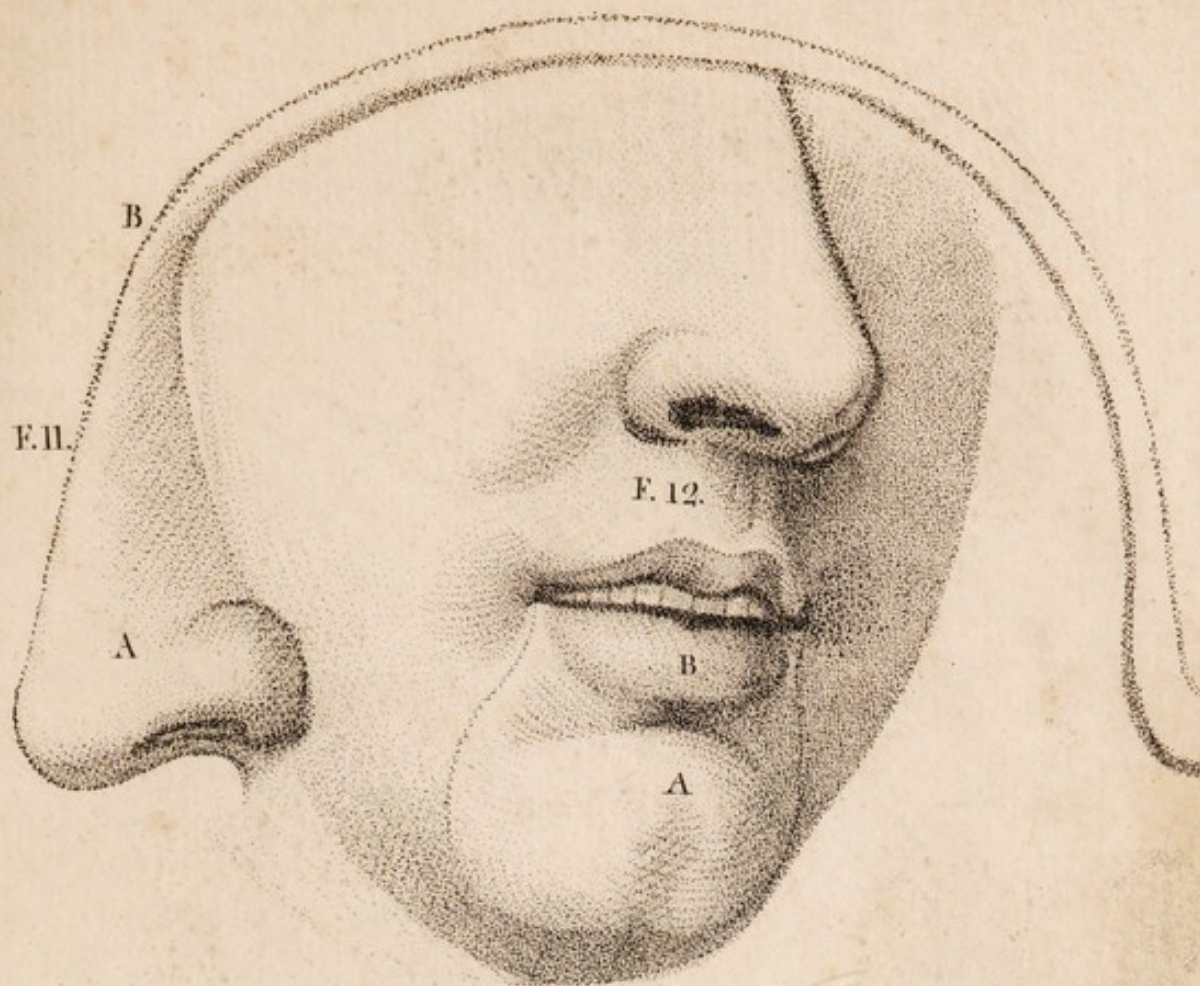
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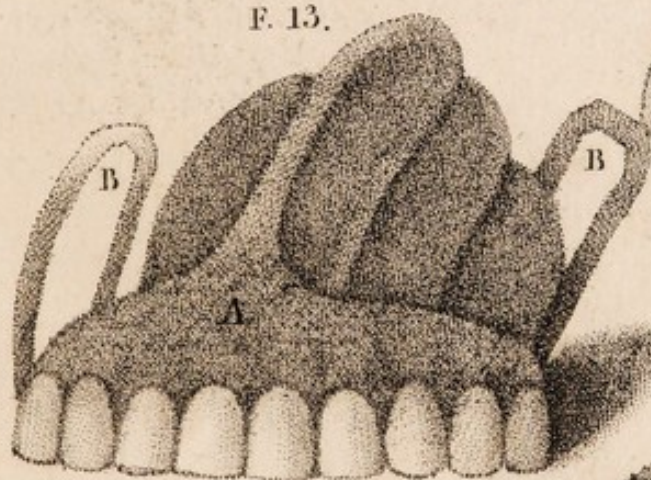


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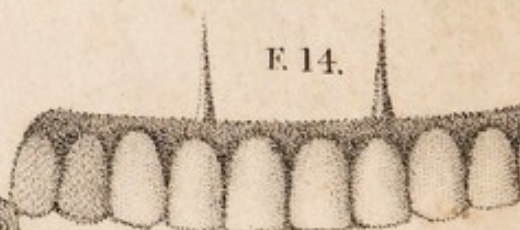


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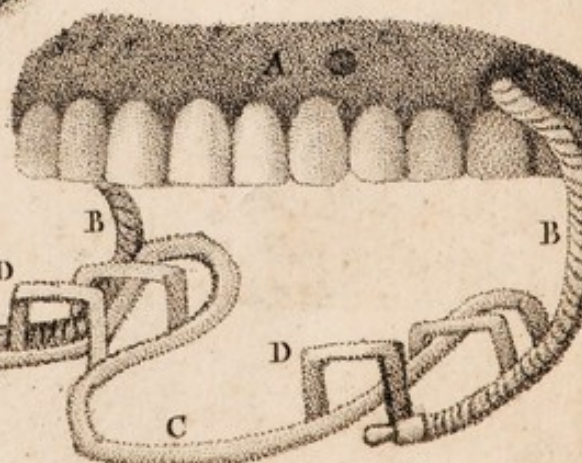
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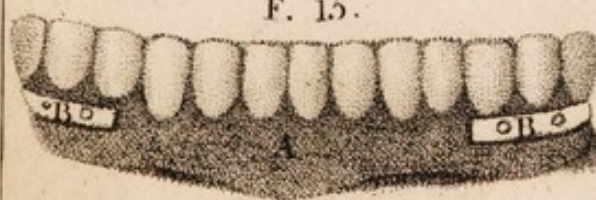
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THE success attending the new discovery of artificial teeth formed of a mineral substance, in this kingdom, during seven years that the author has been established in it, and the confidence obtained from several of the nobility and the public in general, has determined him to continue resident in this metropolis, where he has obtained from his Majesty an act of naturalization, and he takes this opportunity to make the most respectful acknowledgements for the patronage he has received, by submitting the present work to attentive consideration.

In order to prove the superiority of the invention, to every thing of the kind which has hitherto been practised, it is thought necessary to place at the end of the Dissertation, the approbations and recommendations of the Academy of Sciences, and of the Faculty and Royal Society of Medicine at Paris; as also some of those which have been given by eminent physicians and surgeons, who have been eye-witnesses of the success of the operations: of this number are Dr. REYNOLDS, Dr. VALANGIN, Sir WALTER FARQUHAR, Dr. ROWLEY, Dr. MOORE, Dr. POIGNAND, Dr. PEARSON, Physicians of London; Messrs. JOHN HUNTER, TOMKINS, EARLE, YOUNG, CORP, MOORE, BRAND, and SAUMAREZ, Surgeons of London, as also Mr. MARCH, Surgeon-dentist in this metropolis; Mr. YOUNGE, and Mr. GROOT, Apothecaries. In France; Mr. FOURCROY, Mr. PETIT, Mr. DARCET, Mr. VICQ D'AZIR, Physicians of the Faculty of Paris; Mr. LOUIS, Surgeon of Paris; Mr. SABBATIER, principal Surgeon of the Hospital for disabled soldiers at Paris; Mr. BRADOR, Surgeon at Paris; Mr. DESAULT, principal Surgeon of the Hotel-Dieu at Paris; Mr. SUE, principal Surgeon of the Charity-Hospital; Mr. BEAUPREAU, Surgeon-dentist at Paris.

If the names of more than three thousand persons could with propriety be mentioned, who make use of the new invented teeth, which are the subject of this Dissertation, this approbation would fully prove the superior advantages of teeth formed of mineral paste: but preserving inviolate those bounds the confidential duties of the profession prescribe, no patient's name can be pronounced without the most express permission.

As no persons can legally attempt to imitate the mineral-paste teeth, until the expiration of the time allotted for the patent granted by his MOST GRACIOUS MAJESTY to the author, it may happen that some artists, consulting their own immediate interests, will try to depreciate this useful invention to those who may require artificial teeth. In order to obviate every possible objection, the author informs the public, that no person shall be obliged to take the teeth that may be bespoke, if, alibough they be made according to the rules of our new art, he should not like them. If such case should happen, they will be formed again, it being the author's wish that all persons be fully satisfied. It is not doubted, that when the time for his Majesty's Royal Patent may be expired, those who now may attempt to decry the merit of the present invention, will be the first to recommend them, and to lay aside the use of teeth made of animal substances, in favour of the mineral paste teeth: as however some time must elapse before they may be enabled to carry such projects into execution, and as a long experience may be necessary to qualify the artists to operate with success, the author is under no apprehension of being deprived of the advantages of this important discovery.

N. B. The author respectfully acquaints his annual subscribers, that they will find him at home, on Mondays, Wednesdays and Saturdays, from ten till two o'clock; and those persons who only wish to consult him, will find him on other days from twelve till two.

DISSERTATION

ON

THE UTILITY OF ARTIFICIAL TEETH.

AMONG the number of charms which constitute perfect beauty, if the eyes, commonly called the mirror of the soul, are justly considered as holding the first rank, the teeth, which may be called the index of health, appear to have a similar prerogative, and to be reckoned among the advantages which more particularly attract notice. Whoever could be so fortunate as to discover an infallible method of preserving them always sound and beautiful, would certainly make a discovery much more precious and beneficial to mankind, than that which is now offered to the public. The number of evils which precede or accompany the loss of natural teeth would vanish away, and thus the human species would be relieved from an essential part of their numerous afflictions.

But unfortunately, all the researches, which have been made hitherto, either by science or industry, for preserving the teeth sound, have proved abortive; either because the diseases of the teeth are of the same nature as the others, to which the human body is sub-

ject, of which some finally become incurable; or because many people are negligent in having their teeth cleaned, which are covered with tartar, and suffer particles of food to remain between them, which getting putrid, make the substance of the teeth carious, with more or less rapid progress. The rottenness or cariousness of the teeth, after having caused a bad smell, frequently occasions an insupportable pain, which forces the sufferer to have them extracted. In short, the sockets of the maxillary bones are also affected by diseases, which cause the natural teeth to drop out, although they be very sound. The design of this work however, being only to speak of artificial teeth in general, and in particular, of the inconveniences of those kind of teeth as supplied by other artists, compared with the advantages of the present new discovery; the particulars of all the different diseases, which affect the teeth, shall not, at present, be explained, but a compleat treatise, the result of long observation and immense practical experience, shall hereafter be published.

When through some accident or malady any person has had the misfortune of losing one or several teeth, the necessity of getting them replaced is very soon felt, on account of their utility for mastication, the use of speech, and the ornament of the mouth. But amongst the many motives which induce people to use false teeth, there is one which perhaps never has been thought of, and that is, their utility to sustain and support the natural teeth, which still remain.

Until the present, people fancied, with some appearance of reason, that artificial teeth made the natural loose and drop out, and this consideration has hindered many persons from making use of them, for fear of losing the teeth which were still remaining. As numerous practical facts carry the most positive conviction that they cannot produce this effect, it is incumbent to contradict this false notion, and it may be confidently asserted, that people have been led into this error, for want of knowing the true cause of the falling out of the teeth. This is the reason, which now induces the author to prove physically, that it cannot be justly attributed merely to artificial teeth, but only to the manner in which they are made, and to the kinds of substances, which have hitherto been made use of to form artificial teeth.

All those substances indeed, being neither solid nor sufficiently durable to bear the friction occasioned by mastication, it must follow of course, that the artificial tooth becomes too narrow for the space which it should fill up, and consequently, larger or smaller intervals are formed between the artificial tooth, and the teeth to which it is fixed. These vacancies become larger daily, by the continual friction, which cannot be avoided in mastication, and the thread which fastens the artificial tooth to the natural, shrinking, forces them towards it, by which means they begin to get loose, and finally come out of their sockets, without its being possible to hinder this accident. Little reflexion is therefore requisite to convince man-

kind, that the loss of their natural teeth is not to be attributed to the artificial; but only to the manner in which they are made, and to the choice of the substances of which they are composed.

It is found by experience, that when those teeth are made with exactness and precision, of a solid and lasting matter, taken from minerals, instead of loosening the natural teeth, they on the contrary consolidate them, and consequently make them last longer.

The truth of the assertion can yet receive a new degree of force and evidence by the following comparison. Let the keys of a harpsichord be surveyed, the different stops of which are too distant from each other, and it will be found, that by constant use, the oscillation will soon put the whole instrument out of order.

If this comparison be applied to the teeth which stand by themselves, it will immediately appear, how much solidity they must acquire, when, whatever intervals may exist, are filled up by the applying of false teeth exactly made.

Perhaps it may be objected, that their weight might be susceptible of making the teeth fall out, to which they are fastened. This may be answered by saying, that no instance of this nature has occurred, and it may be added, that their weight is so trifling, as to render such an event impossible.

ON THE UTILITY OF ARTIFICIAL TEETH FOR MASTICATION.

As to the utility of artificial teeth, in regard to mastication, every person may conceive how very necessary and useful they are. Health depends as essentially on the good trituration which is made, as on the choice and use of food. The author of nature gave different forms to the teeth of men and beasts, that they might with the greater facility part and grind their food, before it passes to the stomach. The incisors pierce into and tear the food, the molares grind it and crush it as a mill would do, and their name is thence derived. Digestion is partly thus prepared by those combined helps, from whence proceeds a more favourable and good chyle; on which depends, in a great measure, good or bad health. Those who, through old age, have lost their teeth, are commonly subject to indigestions and stomach complaints, particularly in an age, in which exhausted nature stands in more need of making a good trituration.

The entire or partial loss of our teeth, besides being a real deformity, has another inconvenience. It is impossible for those persons to whom this misfortune happens, to chew properly, for the natural construction of the maxillary, or jaw-bones, hinders them from touching one another. They are so far from being able to grind their food small, that they cannot even press it between the gums.

ON THE UTILITY OF TEETH, WITH RESPECT TO THE USE OF SPEECH, AND THE ORNAMENT OF THE MOUTH.

If teeth be absolutely necessary for mastication, if they be the principal ornament of the mouth, they are not less beneficial for the use of speech. Old people, and those who have lost their teeth at an early period, are so many proofs of this unquestionable truth. They cannot make any distinct and perfectly articulated sound, and it often happens, that what they wish to express, cannot be comprehended.

ON THE INVENTION OF ARTIFICIAL TEETH IN GENERAL.

To restore to man all the advantages of which he finds himself deprived by the loss of teeth, and to remedy the inconveniences which this loss brings along with it, recourse has been had to artificial teeth, but since human industry has contrived to make up this deficiency, this art has always been limited to the choice of animal substances: for this purpose, sea-horse's, elephant's, ox's, and calf's teeth, teeth extracted from dead human bodies, &c. &c. have been made use of, and even human teeth from living persons. All these substances, though very good in appearance, soon rotted, became black, and caused as pernicious a smell, as the *miasmata* which they produced were pernicious to health.

These facts, which professional men have often had occasion to verify, are nevertheless not known sufficiently, in general; for which reason, it is incumbent, for the advantage and instruction of the public, to expose those which have become the most notorious and authentic. I consider them to be more than sufficient motives to cause the dangerous use of the different animal substances, which dentists have employed till the present, to be henceforth entirely abolished; and as all effects have necessarily an efficient or occasional cause which produces them, it will be expedient to explain first, of what nature the animal substances are, which artificial teeth are made of. Chymistry proves evidently that those animal substances are formed of two principal parts, the one earthy, and the other gelatinous, a kind of glue, which cements the earthy part together. This gelatinous part being about fifteen times larger in bulk than the earthy*, is consequently more subject than the latter to the different alterations, which animal substances undergo. The natural heat of the mouth, and of food and drink, their operation, their acidity, and in short, the quality of the salivary juices, put this gelatinous part in a continual state of fermentation. All these causes, which are more or less destructive, ac-

* Those who desire to be convinced of this truth, may burn fifteen teeth in a crucible, and they will find that what remains after this operation, will not weigh as much as a common tooth.

according to the constitution or state of health of mankind, incessantly acting either separately, or altogether, soon occasion the dissolution and putrefaction of that dead substance. The *miasmata* and morbid particles, which exhale from the teeth of animal substances, are introduced into the stomach by our spittle, and the air, which we breathe, carries likewise into the lungs, those very putrid *miasmata*, which, by that means, are absorbed into the mass of blood*.

Since I have fixed my residence in London, I have had opportunities of making new observations and improvements conjointly with several eminent physicians and surgeons. These facts and observations confirm all that has been advanced, on the horrid smell and the corruptibility of animal substances, through the rottenness of the bones of the palate, and of the sockets of the jaws.

To corroborate this explanation, which I think adapted to give a new degree of force and evidence to my assertion, I will add the following facts.

1st fact. Of several patients, who were sent me by Mr. John Hunter, I shall only

* See J. H. Hunter's Treatise on Venereal Complaints, from page 391, to page 398, and the Medical Transactions, 3d vol. p. 328. Pancouke's edition of the French Encyclopedia, 67th delivery, the article surgery, vol. the 1st, part the 2d, page 405, where the inconveniences of teeth made of animal substances are mentioned, as also the danger of transplanting human teeth, and the advantages and salubrity of those of the new invention.

mention one. He had violent pains in his stomach, and his breath was so putrid and infectious that it was scarcely bearable. This was attributed to two partial sets of artificial teeth of a sea-horse, which he had got placed between some of his teeth that were yet remaining. Two days after I had removed them, the bad smell entirely ceased, and his health, which was already greatly impaired, soon was recovered.

2d fact. I have in the presence of Sir Walter Farquhar, drawn twenty-eight teeth from the mouth of the Duchess of *****. Those teeth were carious or rotten to such a degree, that in some parts they were quite destroyed, and they produced an infectious and insupportable stench: the matter which discharged from them had rendered the internal edges of the sockets so tender, that the teeth were turned side-ways. Her Grace desired me to extract them, and the anxiety this noble lady suffered to be freed from this injurious mass of corruption, made her Grace determine, against my advice, to have twenty-six teeth drawn in one sitting. Sir Walter assured me, he never saw a mouth in such a state, nor such extraordinary courage. Some time after, I made this noble lady a complete set of teeth of mineral paste. Her Grace was before subject to frequent pains in her stomach; the colour of her face was yellow and rather livid. These indispositions ceased, and in the space of a few months the lady recovered her complexion and health, as her Grace informed me in a letter, which she did me the honour

to write, thanking me for the attention I had given to the case.

3d fact. Having been called to a consultation, together with Mr. Vicq d'Azir, physician to the Queen of France, to examine the mouth of a lady of quality, who having been more than six months afflicted with a slow fever, was pining away in a state of *marasmus*, which altered her constitution daily. I found that the artificial teeth of animal substance, which she had, were become black, and exhaled a fetid and unsupportable smell. As every thing which had been done till then, to cure this disorder, had been ineffectual, I did not hesitate to declare, that this fever was occasioned and continued by the absorption of the infected matter, or particles, which came off from the rotten teeth *. Mr. Vicq d'Azir agreed with me, that it was necessary to have them removed; the fever ceased soon after. I then proceeded to place, instead of the teeth of animal substances, others, made of my mineral paste, and in the space of five or six months, this lady recovered her complexion, and gathered strength and fulness of habit daily.

4th fact. Mr. Geoffroy, an eminent physician of the faculty of Paris, having sent me one of his patients, seventy years old, burdensome to himself, and to all those who came

* See on this subject a Treatise on Venereal Complaints, by Mr. Fabre, eminent surgeon at Paris, page 249, the last edition.

near him, on account of the stench of his breath. I remarked, that he had a complete set of *human teeth* mounted on an *ivory basis*. I advised this gentleman not to make use of it any more. After having removed this cause of infection and sickness, I made him a complete set of teeth of mineral paste, and had the satisfaction to see him recover his health in a short time.

5th fact. A patient had a silver palate with a sponge, which served to fix it in his mouth*; not being able to bear any longer the fetid smell which constantly attended him, he went and consulted the celebrated M. Default, principal surgeon of the Hotel-Dieu at Paris; this eminent man advised him to come to me, which he accordingly did; I found, by examining him, that the infection proceeded from the *mucus narium*, &c. which impregnated the sponge, and which the patient could not clean, on account of the difficulty he found in taking off and putting on the palate. It was easy enough to persuade him not to use it any more. I made him another palate of mineral substance, which answered in the most complete manner. The patient not only recovered his health, but had the double

* As no mechanism had yet been invented so simple as the one of my contrivance, a sponge had been made use of, to fix the artificial palate in the patient's mouth. This sponge swelling by the moisture, kept up the palate, but at the same time imbibed the humours that came from the nostrils, which being heated by their retention on the sponge, were in a continual fermentation, or state approaching to putrefaction.

advantage of speaking with more facility, and of having a more sonorous voice, than when he made use of his silver palate *.

OBSERVATIONS ON THE PRECEDING FACTS.

1st observation. Among the persons to whom I have been called, together with Sir Walter Farquhar, some were forced to have bones extracted from their palate, and rotten teeth. I have had the most complete proof of the corruptibility of animal substances, for as soon as those vacancies have been replaced by teeth and palates of my invention, the bad smell ceased, and the patients recovered their health.

2d observation. I preserve the remains of several sets of teeth made of animal substances. They all have evident marks of the dissolution and corruption, which is inseparable from their nature. They would get corrupted and dissolved, if they were to remain for any length of time in pure water, consequently, they must be more so, being incessantly exposed to the dissolving operation of the spittle, the breath, and the active particles of the air and food.

* The sensible difference in the sounds which the patient articulated, as soon as he made use of my artificial palate, is a very natural effect, and very easy to be conceived. The sponge fixed to the silver palate, which he used before, absorbed the sound, and made it still hollower, when the sponge was imbibed with the *mucus narium*.

These observations, and a great number of others which I have made, together with Messrs. Sue and Sabatier, eminent surgeons at Paris, when I practised surgery in that capital, and also since I have been employed in the profession of a dentist, to which the success of my discovery has determined me to dedicate myself entirely, authorize me to conclude, that the more a mouth contains rotten teeth, and artificial ones of *animal* substance, the greater is the mass of corruption. A strong and healthy constitution may sometimes not suffer much, as may be seen in the endemic and epidemical disorders, but persons, who are naturally weak and delicate, most commonly suffer more or less, or even fall victims to it.

ON THE DANGER OF TRANS- PLANTING AND USING HUMAN TEETH.

Modern surgery had contrived another method, and this was to draw sound teeth from one individual, and to place them in another's mouth*. The accidents and disorders oc-

* Transplanted teeth can never recover life, as the public, and even some practitioners were led to believe. True it is, that they can be fixed, and that they acquire a certain degree of solidity by the contraction of the sockets, which like all bony parts, have a tendency to draw near again to each other, but they always remain there as a strange body, not susceptible of taking any root. For them to partake of the principle of life which preserves the other teeth, it would be necessary that the nerves, the artery, and the veins, which gave blood, nourishment and sensibility to

caſioned by this practice, as dangerous as it is immoral, have had ſuch fatal conſequences, that I think I cannot make them too public. I alſo requeſt thoſe perſons, who wiſh to be more enlightened in this matter, to read what Mr. *John Hunter* has written on this ſubject. This eminent ſurgeon, in his Treatiſe on *Veneréal Diſeaſes*, which he publiſhed in the beginning of the year 1786, gives fix inſtances of diſorders and extraordinary ſymptoms in ſome perſons, who uſed human tranſplanted teeth. He affirms, that ſeveral gentlemen of the profeſſion have been of opinion, through divers circumſtances, that they contained a venereal or ſcrofulous virulency, &c.

Thoſe accidents, ſay ſome authors*, have always commenced by an ulceration of the gum, ſome weeks after the tranſplantation, and after the tooth had got perfectly firm. The ulceration, which uncovers the root of the

the extracted teeth, ſhould exactly meet and unite thoſe which are tranſplanted, and make one body with them, ſo as to re-eſtabliſh the circulation of the blood and nervous influence in thoſe parts, which is impoſſible. Such a ſuppoſition is abſurd. Experience proves on the contrary, that they are more ſubject than the others, to ſpoil, either by getting yellow or black, or by rotting, &c. The obſervations made by me on different teeth, which had been tranſplanted, have convinced me that no ſuch thing exiſts as the reviving of a veſſel, for after I had cut ſeveral of thoſe *tranſplanted* teeth through the middle from one end to the other, I diſcovered no trace of a veſſel in the canal. Theſe facts determine the ſubject beyond all doubt, but even anatomical reaſoning muſt ſhew that a regeneration of *nerve*, *artery* and *vein*, is impoſſible.

* See the French Encyclopedia, 67th delivery, Surgery, vol. 1, 2d part, page 406, and 407.

tooth and the socket, soon spreads to the neighbouring parts: the teeth fall out, the sockets become rotten, ulcers are formed in the throat, and blotches break out on the skin, as it happens in venereal diseases: exostoses are formed, and besides those symptoms, a slow fever comes on, with agitations, want of sleep, head-aches, and loss of appetite, &c. These accidents have been cured in some people by mercury, and in others without it, but the first precaution, when this disorder appeared, was always to extract the teeth which were the cause of it.

If all those symptoms or accidents have been produced by sound teeth, drawn from persons, who had never been afflicted either with the venereal disease, or with scrofulous disorders, it is then certain that there exist in some individuals, contagious impurities, which are unperceivable to practitioners, and which can only be discovered by the effects they produce. It is also certain, that in this case, irritation alone, may produce an inflammation in the gums, the throat, &c. and make the socket rot, by means of a tooth lately *transplanted*, which acts as an animal substance, the more heterogeneous as it is impregnated with strange blood. If then, it be proved, that the transplantation of one or several teeth can communicate the venereal virulency, or the scrofulous infection, which existed in the person's blood from whom one or several teeth were taken, it is evident, that the dangerous practice of transplanting human teeth ought to be

for ever *banished* from the profession of a dentist, and they ought not to be made use of in any manner whatsoever*, either with pivots or otherwise.

ON THE ADVANTAGES OF INCORRUPTIBLE MINERAL SUBSTANCES, TO MAKE ARTIFICIAL TEETH.

Being convinced of the multiplicity of accidents occasioned by teeth of animal substances, and surpris'd at the little progress which art had made in this branch of surgery, I have dedicated myself entirely to it, and have made it the object of my particular researches. I have multiplied my experiments, without ever having been discouraged by the jealousy of those whose interest it is to continue abuses, and to propagate the error of so pernicious a practice, nor by the considerable expences of the processes necessary to perfect the discovery. I have found amongst minerals, durable and uncorruptible substances, on which neither the air, the saliva, nor the active parts of food, make any impression, and on which, even the strongest corrosives have no effect†. This

* I insist on this point in behalf of humanity, because I am persuaded that, in whatever manner human teeth are used, they are very dangerous. Their dissolution, occasioned by the fermentation which results from the heat of the mouth, can inoculate the distemper of the person out of whose mouth they were taken.

† Aqua fortis is so far from spoiling the teeth made of this matter, that it preserves them in all their beauty, and

matter is susceptible of the forms, which are most proper for the important functions which are wished to be re-established.

In short, after many researches, I have at last discovered means to make a mineral paste, which is ductile and susceptible of receiving the just and exact impression of the gums and pieces of teeth, without any need of extracting the latter.

I have succeeded in giving to their substance, by a particular process, a degree of solidity, which renders it capable of resisting the greatest efforts without breaking, or producing any of the effects, which may follow from breaking, or from the exfoliation of the *animal substances* hitherto employed.

The colour which is given to this composition is unalterable: the colour of gums can be exactly imitated, which is of the utmost importance, the deficiency of the jaws remedied, and by imitating on the substance, formed at pleasure, the original colour, which is natural to the parts, necessary to replace, a degree of perfection is obtained, hitherto unattempted.

C O N C L U S I O N.

If it be considered, that teeth made of a *mineral substance* have so many other advantages, that of being easily formed to fit

it is even the best thing that can be made use of to clean them, when any extraneous substance sticks to them, and to give them their first brightness. It is sufficient to take them out of any person's mouth, and let them lay a few minutes in aqua fortis.

well on the gums, is singularly beneficial. A very small separation is admitted to the *paste-teeth*, so that no food can remain between them, and all sorts of colours of teeth are so exactly imitated, that they look exactly like the natural. Under such circumstances of real advantage, no reflecting and candid person will hesitate to give them that preference, which their incorruptibility alone entitles them to*.

In order to give, in an abridged view, an idea of the superiority of this new invention, to all methods that have as yet appeared to remedy the loss of natural teeth, this dissertation shall be concluded by a parallel of the advantages and disadvantages of the different modes of supplying artificial teeth, by which, the discerning public will be enabled to decide on the *defects* of the old, and the *merits* of this new improvement.

A PARALLEL BETWEEN THE TEETH OF ANIMAL SUBSTANCES, AND THOSE OF MINERAL SUBSTANCE.

DANGERS OF TEETH MADE OF ANIMAL SUBSTANCES.

First. They are corruptible, and occasion continually a fetid smell, which is insupportable to the patient, and to those with whom he converses.

ADVANTAGES OF TEETH MADE OF MINERAL SUBSTANCE.

First. They are incorruptible, and never cause any bad smell in the breath; therefore, they are not suspected to be artificial.

* See the French Encyclopedia, art. medicine, 67th delivery, vol. the 5th, part the 2d, at the word tooth, page 377, where the advantages of this *new* discovery are specified.

Secondly. They wear out in a very little while and exfoliate. The short time they last, and their want of solidity, force people to have new teeth made very often, which is the source of repeated expences.

Thirdly. Their substances being bony, they must be worked with a file and burnisher, from whence follow several inconveniences: they can never take the exact form of the edges of the sockets, they occasion continual pains, they are so far from joining to the gums, that the victuals remain in all the empty spaces, and cause a fetid smell.

Fourthly. The loss of teeth causes the edges of the sockets to sink down, and ruins the gums, from whence the deformity of the mouth results. It is not possible to remedy this deformity perfectly with teeth of animal substances; because one can neither add the gums, nor give a natural colour to the teeth. Nor can the mastication of hard substances be with any force performed.

Fifthly. Teeth of animal substances being subject to corruption and rottenness, get loose from their *pivots*, because the holes which serve to fix them become larger, and the teeth fall out: it often happens that they are swallowed down with food, and the pivot remains at the root, &c.

Sixthly. Those teeth, which at first are very white, soon become very brown or black, and a striking contrast is perceived between them and the other teeth adjoining.

Secondly. They are extremely solid and hard: a compleat set of teeth can last a man's life, without being worn out, consequently the expence is trivial, compared with the necessity of repeatedly having new sets of teeth.

Thirdly. Their substance being a *paste*, it is susceptible of receiving the impression and the form of the edges of the sockets and of the gums, so that the *artificial teeth*, or sets of teeth, either partial or compleat, do not cause any pain by their pressure, and do not leave any empty spaces, where the food can remain, or become corrupted.

Fourthly. With the mineral substance, there arises the double advantage of being able to form *artificial gums*, and to give them a lasting colour, as also to the teeth; both which imitate nature so accurately, as not to be discovered from the original natural teeth and gums, and they answer all the purposes of even biting a crust, or any aliment, without the least pain, or inconvenience.

Fifthly. According to my method, the teeth, sustained by gold pivots, can never get loose from them, because those pivots are riveted, and soldered to the *paste* itself, as if they were the same body, with which they continue equally firm.

Sixthly. I give the *new invented* teeth the colour, which is proper to correspond with the natural, and that colour remains unalterable.

With the mineral substance I can successfully make artificial palates, noses, and every other part of the face * which may have been lost by accident: the colour also resembles nature.

The use of these articles is easy, and they fit perfectly, because the paste of which they are formed, is, as it were, moulded on the parts which they are to replace.

I shall now proceed to speak of the mechanism, and of the spring made use of to support the teeth, sets of teeth, palates, &c. which I have likewise invented. It was not enough to have at my disposal a solid matter, and which could be moulded into any proper form; the springs made use of were defective, therefore, I have invented others, which are both solid and flexible: they are adapted to obey without any inconvenience all the motions of the jaws, even that of rotation, which other artists had never been able to effect, and this has gained me the approbation of the *Academy of Sciences* †, and of many professional men. I have also invented a very simple and very solid mechanism to support a palate, or a set of upper teeth, either partial or complete. In short, all the articles ‡ of this new

* I made for a physician's daughter, an artificial chin, which was examined by Dr. Poignand, and Mr. Young, surgeon. This young lady had lost in the small-pox, her chin with the under lip, and some teeth, which accidents I perfectly remedied.

† See the account of the Academy of Sciences, &c. &c.

‡ In order to form an idea of the chief articles and mechanism of my invention, the two plates may be consulted,

invention can be easily taken out, and put in at pleasure, without occasioning the least pain. As I myself make every thing that concerns the different branches of mechanism which belong to this new art, I can form them as perfect as possible, proportioning the flexibility and elasticity of the springs and mechanism, agreeably to the tenderness of the gums.

Report of the Academy of Sciences concerning the Teeth, and sets of Teeth, of the new composition of M. Dubois De Chemant. Extracted from the Registers of the Royal Academy of Sciences, the 10th June, 1789.

“ M. DARCEY and I have been charged to examine the teeth, and sets, of a new composition, which M. Dubois De Chemant has presented to the Academy, and to give in an account of them. The company has been able to judge as we have, that those teeth and sets very nearly imitate nature, as well by their form and colour as by the portions of artificial gums which support them, and to which M. Dubois De Chemant also gives a very great likeness to natural gums. But what merits for them a considerable preference beyond all those which have been composed hitherto, is, that they are of a hard substance, upon which the saliva and the particles of food which remain in the mouth, have no effect; whereas the others, made of animal substances, and little resembling natural teeth, are easily spoiled, acquire a dirty colour, and contract a smell as offensive as it is prejudicial to the health. The matter which M. De Chemant makes use of is a mineral paste, to which, after many essays, he has found means of giving a colour like to that of the teeth which he means to supply. He can mould it into any form so as to make whole sets, half sets, either for the upper or lower jaw; portions of sets, when there remain above or below teeth, which may be preserved, single, double, treble, or quadruple teeth, as necessity requires. The whole sets are put in motion by means of springs, of M. De Chemant's invention, which are very different from those used heretofore, and which not only separate the parts when the jaws are distended,

placed at the beginning of this work. Through fear of causing confusion, I have been forced to omit in them several particulars, which are both useful and curious.

but also allow the side motions. These springs are applied to both sets, even to the upper ones, in a manner as simple as it is ingenious. A mechanism equally simple joins the parts of sets to the natural teeth which remain; and single, double, or treble teeth fit with the greatest facility, because M. De Chemant has found means of boring his paste so as to place pins in them, and to make any slides he pleases.

“ His manner of taking measure of the teeth which he intends to replace, adds greatly to the merit of his invention. His process is such, that each piece is moulded, as it were, for the place which it is to fill; and as for the whole sets, half sets, or any other portion whatsoever, their base receives and surrounds the edges of the gums, or the part on which they are applied, so as to render their position very solid, and to prevent the painful pressure they may otherwise occasion. By this process he can preserve, as long as he pleases, the moulds of all his pieces, and can take very exact and precise measures of persons at a distance whom he never saw; and provided he be informed exactly of the colour of the remaining teeth, he is sure to send pieces which will fit with the greatest exactness, as well as if he had taken the measures and placed the teeth himself.

“ M. De Chemant's paste is very solid; it cannot be broken between the hands, without employing very great strength. The substance of it produces fire with steel; it is not affected by acids. The weight of it is less than that of porcelain. M. Brisson, who has been pleased to determine it, found that a cubical inch of it weighed one ounce, two gros*, and sixty-nine pennyweights; whereas the lightest china of Seve, of the seventeen kinds which he tried, weighs one ounce, three gros, and nine grains.

“ Having examined the teeth and sets of teeth made by M. De Chemant, after seeing the manner in which he takes his measures and forms his moulds, having inquired into the springs and the means he employs to adapt his pieces, in order to justify the confidence laid in us by the Academy, we thought proper to see some pieces placed on; we therefore went ourselves to the houses of different persons who make use of them, and who have consented to be visited and to answer our questions. We have seen teeth of every kind. The persons to whom M. De Chemant conveyed us are all of a distinguished rank, and of course beyond all suspicion of any other views in what they told us than those of doing justice to truth. They assured us they felt no sort of inconvenience from the pieces they make use of, and that they became accustomed to them in a very short time, and with ease. They use them to eat, and find them of assistance in the action of chewing as well as of speaking, at the

* A gros is the eighth part of an ounce.

same time that they remove the deformity arising from the want of teeth. We have seen no person whose pieces have either lost their colour or received any other hurt, by any bits falling off; and though that should happen, and some scraps should mix with the food, we think we may affirm, that nothing dangerous could result from it, and that those particles may be swallowed without any more danger than particles of bones of fish or any other animal, or any other hard substance which we are liable to swallow in eating. There is then nothing to apprehend from the teeth or sets of teeth made by M. De Chemant, which moreover possesses all the advantages that can be desired.

“ The Academy will, no doubt, permit us to conclude, from what has been said, that the artificial teeth and sets of teeth, of M. De Chemant, deserve being approved by it, and that it would be proper that history should mention the happy application he has made of a hard and incorruptible matter to an end so useful as that of supplying the want of lost teeth.

(Signed)

“ D'ARCET and SABATIER.

“ *At the Royal Academy of Sciences, June 10, 1789.*”

“ I certify the present extract is agreeable to the original, and to the judgement of the Academy.

(Signed)

“ The Marquis De CONDORCET.

“ *Paris, June 21, 1789.*”

Report of the Commissioners, appointed by the Faculty of Physic of Paris, to examine the new Teeth and Sets of Teeth, invented by M. De Chemant.

“ Mr. Dean,

“ We have examined the new artificial teeth and sets of teeth, which the Sieur De Chemant forms of a paste of his composition, which he hardens by the fire; their hardness is so great that they long resist the hammer, and often produce fire, like flint struck with steel: no kind of acid can dissolve them; a piece, representing the whole set of the upper jaw, may be thrown against the floor, without breaking.

“ The sets for the upper jaws are of one entire piece; the teeth are not separated by real interstices; they are represented each according to its natural form, and a coloured shade seems to separate them. The gums are also perfectly imitated: on the edges of these sets, are some inequalities which represent the upper extremities of the different kinds of teeth.

“ By the form which the Sieur De Chemant gives his teeth, they perfectly resemble nature; he has also discovered the means of giving them the colour of the natural teeth, to which

they are substituted, so that they cannot be distinguished from the natural teeth of the person who wears them; and as the substance of which they are made is incorruptible, it loses none of its properties by time.

“ The whole set, composed of an upper and lower jaw, is jointed by a spring, invented also by the *Sieur De Chemant*, by means of which both jaws move with great facility, and without any troublesome or inconvenient resistance to the bearer, in their different movements. We have seen a person wear an upper set, which fitted perfectly, was no ways incommodious to the patient, who, whenever he spoke or laughed, seemed to have a beautiful set of teeth. We have also seen several teeth joined together, in the mouth of a person, who may be relied on, and who assured us, he could eat with those artificial teeth, as well as he formerly used to do with his natural ones.

“ This invention of *M. De Chemant's* seems to us, to unite all the advantages, which persons who want artificial teeth, can wish for. When he is about to supply the defect of one, or many contiguous teeth, he takes with his paste, the length of the space to be filled, and the form of the edges of the gums, with the greatest precision; he then forms a piece which fits so exactly as never to incommode the wearer. The hardness of the composition is such, that it never wastes by mastication, and its incorruptibility prevents it from being dissolved either by solid or liquid food: as the teeth are not separated in their length, no parts of the aliments can remain amongst them.

“ Hitherto dentists had no other means of supplying the want of teeth, than the bony substances of different animals, of which they formed either single teeth, or many teeth together, or whole sets of teeth; they took a part of a bone to form the piece they wanted, and made use either of a file or a saw to work it: when they intended to make a set for either, or for both jaws, they gave a piece of bone the proper shape, and then marked with a saw on the surface, a line to imitate the space which commonly divides the teeth from each other; these teeth, particularly those of the fore part of the mouth, rather resembled the keys of a spinnet than real teeth, and had a considerable opening, as well at their upper end as in their whole length; parcels of food remained in them, fermented in the mouth, corrupted and exhaled an infectious smell, as noxious to the patients themselves, as intolerable to those, to whom they spoke too closely.

“ We think it proper to observe, that the file and saw employed to shape those teeth or sets of teeth, made of bone, by opening a great number of pores in them, where the juices of the mouth and aliments could penetrate, disposed them to corrupt in the mouth: it is a fact, that those bones softened, corrupted, and wore away in the mouth. We have seen on the same set, two exfoliated teeth, and we lay before the faculty, an

old set, which we received from the Sieur De Chemant, which became soft and black in the mouth of the person who wore it.

“ M. De Chemant's teeth have none of the inconveniences of those made of bone: they have the advantage of resembling perfectly the form of every kind of teeth, of representing the intervals without leaving any void space, of representing the gums, and fitting so exactly on the edges as never to be troublesome to the wearer. We therefore think that the faculty should admit the discovery of M. De Chemant, as an invention which does much honour to its author, and must be very useful to those who are in need of the assistance of this new art.

(Signed)

“ DESCEMET, BAGET, and PETIT-RADEL.”

Extracted from the Registers of the Faculty of Medicine in the University of Paris.

“ In the year one thousand seven hundred and eighty nine, on Monday the second day of March, the Faculty of Medicine assembled at five o'clock in the afternoon, in its upper schools, after having heard the report made to them by M. M. Descemet, Baget, and Petit-Radel, whom they had charged to examine the artificial teeth and sets of teeth, proposed by M. De Chemant, Surgeon and Dentist, has been unanimously of opinion, agreeably to the said report, to approve the same artificial teeth and sets of teeth, composed of a paste which the Sieur De Chemant hardens by fire, so that those pieces unite, at the same time, beauty, solidity, convenience, and salubrity, qualities acknowledged by the Commissioners, as well by the trials made upon the specimens presented by the inventor, as by what they observed with persons who have made use of them, and I have concluded in approving the sentiments of the faculty.

“ EDMÉ. CLAUDE BOURU, *Dean.*

“ On the part of M. M. the Deans and Doctors Regent of the Faculty of Medicine of Paris, I have affixed the small seal, the 5th of March, 1789.

(Signed)

“ CRUCHOT,

“ *First Apparitor and Register Keeper of the said Faculty, in the University of Paris.*”

Paris, April 2, 1790.

“ Experience confirms what I had the honour of telling you, Sir, when you informed me that some person had advanced that the *hepar sulphuris* acted upon your artificial teeth, and made them black.

“ I left two of those teeth during three days in a solution of *hepar sulphuris*. I withdrew them afterwards, and after washing them well, I found they had not undergone the least alteration.

" I keep one of these teeth in order to make use of it occasionally, if any other person should say the *hepar sulphuris* affects them.

" SAGE,
" *Of the Academy of Sciences, Director of
the Royal School of Mines.*"

" I have weighed the sea-horse tooth perfectly dry, and then imbibed with water. When dry, a cubic inch of it weighs 1 ounce, 1 gros, 14 grains. When imbibed with water, the cubic inch weighs 1 ounce, 1 gros, 54 grains; if it be compared with the matter of which M. De Chemant's teeth are made, the cubic inch of which weighs 1 ounce, 2 gros, 60 grains, the weight of the sea horse tooth is found to be to the matter of M. De Chemant's teeth as 8 is to 9, or as 16 is to 18.

" I also weighed an under jaw made of M. De Chemant's composition. I certify it weighed but 4 gros, 34 grains; the two rows together will therefore weigh no more than 9 gros at most. In witness whereof I give the present certificate.

" BRISSON,
Of the Royal Academy of Sciences.
" *Paris, June 19, 1789.*"

A Letter addressed to the Inventor, by Dr. Wm. Rowley, M. D. Member of the University of Oxford, the Royal College of Physicians in London, Author of the rational Practice of Physic, *Schola Medicinæ Universalis Nova*, Physician to the St. Mary-le-bone Infirmary, &c. &c.

To M. DE CHEMANT, No. 1, Frith-Street, Soho.

" SIR,

" It is no less the duty of every physician to be as circumspect in receiving novel doctrines, as to be disposed, liberally, to promulgate useful truths.

" Having known from long observation, that the substances with which artificial teeth are composed, occasion a fetid breath, inimical to the human constitution, I was happy to be informed by some persons of rank and others, with whom I have the honour to be acquainted, that the artificial teeth, formed of Mr. De Chemant's composition, were not liable to many disagreeable inconveniences experienced from others, composed of sea horse teeth, &c.

" Not to be deceived, however, by first appearances, I waited two or three years, and examined from time to time some cases, where the artificial teeth and coloured gums of Mr. De Chemant had happily and usefully supplied the loss of the natural, in persons whose honour and probity were indubitable.

" In order, however, to be more perfectly satisfied of the nature of the composition, I procured some of Mr. De Chemant's artificial teeth, and immersed three pieces, separately, in the muriatic, vitriolic and nitrous acid, where, after they had remained a considerable time, it appeared, that no effect whatever was produced on the composition, colour of the gums, &c. What the fluor acid might have produced, I had no opportunity of trying; but the above experiments were perfectly conclusive in all the points to which the examination was directed.

" The result of these enquiries were:

" I. That neither foods, drinks, nor foul expiration air, could affect the composition.

" II. That the composition being moulded exactly to the shape of the deficiencies to be supplied, they are likely to fit more accurately, than those manufactured from other substances.

" III. That the imitation of the gums is a real improvement, which cannot be imitated by the common methods of supplying defects.

" IV. That in colour and durability, they are quite superior to the common artificial teeth, and by not imbibing the moisture of the mouth, &c. they do not occasion a stinking breath, which is not only disagreeable with whomsoever the parties converse, but, in some degree, by the inspiration of a putrid air, the human constitution may be materially injured.

" V. That, in general, the advantages expressed by the Academy at Paris, and by that learned and excellent surgeon Mr. Sabatier, whom I have had the honour to personally know, are not exaggerated, but strictly conformable to truth.

" VI. That as indigestion, and a number of stomach and other complaints, may arise through the want of sound teeth to masticate the food, I consider the artificial supply of such defects to be very ingenious, and conducive to health, and the present improvement an important discovery.

" From the decided conviction, therefore, that a series of incontrovertible facts can produce in the mind of a cautious enquirer, I must declare, that the invention of Mr. De Chemant is a real and useful improvement, and justly demands the attention and gratitude of society.

" I am, Sir,

" With the best wishes for the success of your invention,

" Yours, &c.

" W. ROWLEY, M. D.

" *Saville-Row, Nov. 7, 1796.*"

" SIR,

" I have perused, with great attention, and with much pleasure, your French Dissertation on artificial teeth. Your observations on their utility are founded on the truest principles of physiology and pathology.

“ The inconveniency, and even the danger arising from artificial teeth being made of animal substances, or being applied by transplantation, must be obvious to every medical man. Your invention removes at once all those difficulties.

“ From my own experience, and the observations I have made on your mineral paste, I have had the most convictive reasons to admire it, as the best substance for artificial teeth.

“ It is durable and incorruptible, and, in its soft state, is susceptible of receiving the form adapted to fill up the chasm or cavity intended to be restored. After it is baked to hardness, it is subject to no brittleness, and yet is so hard as to resist the strongest efforts without breaking. It has a peculiar toughness, which will not yield to the common mode of drilling glass or china.

“ In short, it is an invention which is superior to any means hitherto employed to repair the loss of natural teeth, and ought to be universally adopted, by professional men and practitioners in that branch of surgery, and by every individual who requires their assistance.

“ I have the honour to subscribe myself,

“ Your most obedient humble servant,

“ FRAS. DE VALANGIN.

“ *Fore-Street, May 10, 1797.*”

“ SIR,

“ I received the favour of your letter, requesting my opinion concerning your mineral paste, in answer to which I have the pleasure to say, that several respectable persons, whom you have accommodated with artificial teeth, have given me an opportunity of examining them, among whom I have permission to mention the Archbishop of Narbonne, who has a compleat set. The appearance of your teeth is certainly a beautiful and exact imitation of nature, they are worn with perfect ease, and from the testimony of the parties themselves, they perform the office of trituration extremely well.

“ Indeed, when I consider the properties which your composition possesses, that in its soft state it is sufficiently ductile to take an exact impression of the parts to which it is to be adapted, and when hardened, is capable of resisting the utmost force used in mastication; that it is incorruptible, and insoluble in any kind of aliment, consequently inodorous, cleanly, and pleasant in the mouth, and that it permanently retains the colour which you give it to represent the gums, and to imitate the natural teeth. In justice to your invention, and with a view to promote the health and comfort of mankind, I cannot hesitate to

add my suffrage to its merit, and to declare my opinion, that it is well calculated to supply the defects to which the mouth and teeth are liable.

“ I have the honour to be,

“ Sir,

“ Your most humble servant,

“ J. EARLE.

“ *Hanover-Square, May 10, 1797.*”

“ S I R,

“ I had already had many occasions to convince myself of the superiority of your mineral paste over all animal substances, which have been made use of until now to make artificial teeth. I had also considered the gums, and parts of the palate, that you join with them when necessary; the colour of which is as natural as it is durable, a degree of perfection that belongs solely to your discovery.

“ In consequence of these observations, I advised Miss ———, who had been much disfigured by the small pox, to try your invention, yet, Sir, notwithstanding the good opinion I had of it, it was necessary I should see the chin, the under lip, and the artificial teeth that you made her, to judge how far it had been possible to remedy the accidents resulting from this illness.

“ I have remarked with great satisfaction, that you have remedied, in the most perfect manner, the infirmity and deformity with which she was afflicted, there could only be a substance ductile and solid, such as that of your invention, that could unite advantages so precious.

“ I have the honour to be,

“ Sir,

“ Your very obedient, humble servant,

“ L. POIGNAND.

“ *Parliament-Street, January 8, 1797.*”

“ S I R,

“ The opinions of so many respectable professional men, both in France, and in this country, with regard to the utility of your composition for artificial teeth, have been so very favourable, that you do not seem to want any more testimonies to recommend the useful discovery to the public; however, as you wish I should say where I have seen the mineral paste useful, (which never produces any offensive smell or disagreeable breath) it is but justice to acknowledge, that I have found your artificial teeth worn with perfect ease and comfort, and also the palates made by you of the same composition.

“ I am, Sir,

“ Your most obedient, humble servant,

“ W. FARQUHAR.

“ *Great Marlborough-Street, June 5, 1797.*”

The Opinion of Mr. Thomas Young, Surgeon, No. 4, Coleman-Street, on the Invention of the Artificial Teeth of Mineral Paste, by Mr. De Chemant, Surgeon-Dentist, No. 1, Frith-Street, Soho.

“ S I R,

“ As I am of opinion you have accomplished what has long been a desideratum in Surgery, viz. the means of making and applying an artificial palate in cases of defect, which should possess the properties of the specimen I have had the opportunity to inspect, I cannot doubt but the public in general, and the afflicted in particular, will be pleased to hear of it, and receive an authentic testimony of its having been actually used with all the success, and even greater, than at the first view it seemed to promise. The Case of Mr. ———, is in point; I have, therefore, sent you a simple narrative of facts as they presented themselves to me, to which, (as it has relation to the same case) I have subjoined a short testimony, in addition to the many you already possess, of the superior advantages of your artificial teeth, which you have my consent to publish.

“ I am, Sir,

“ Your humble servant,

“ THOMAS YOUNG.

“ *Coleman-Street, May 6, 1796.*

“ A young gentleman some time since consulted me, with Mr. De Chemant, on account of a large defect of the bony palate, and of the alveolar processes of the upper jaw, with a consequent loss of the front teeth, which they used to sustain. He some time afterwards called on me to shew me an artificial palate and teeth formed of one piece, which Mr. De Chemant had adapted to, and fixed in the part. By means of this contrivance, the hole in the palate was closed, and he was able to speak without that disagreeable lisp, and offensive nasal sound, which is usual in such cases, and he could swallow his food without any portion of it getting into his nose, as it had before done. The defect of the other part of the upper jaw was filled up with a resemblance of natural teeth and gums, so that the functions of chewing, as well as of speech and of swallowing (which had been impaired) were restored to him. It was formed of a substance which Mr. De Chemant calls his mineral paste, and was secured in its place, partly by means of its shape, and partly by a ligature, which attached it to the adjoining natural teeth. The gentleman assured me, that he did not suffer the smallest degree of pain or inconvenience, but was able again to mingle in society, and take his share in the pleasures of conversation, from which he had for some time been excluded. I have had occasion to observe, in many instances, the superior advantages of Mr. De Chemant's artificial teeth, in the various points of view in which they have been so justly represented by the Academy of

Sciences, and the Faculty of Medicine of Paris. But there has appeared to me one circumstance which is not so strongly noticed as it deserves to be, viz. That a composition in the state of a soft and yielding paste like his, admits more perfectly than any other substance of being formed to any shape that may be necessary, whether to supply the defect of palate, gums, and teeth, in the case of a natural fissure; or in case of a defect of teeth only, by moulding it to the surface of remaining gums, to give an easier bed to their pressure; besides which, the natural projection and arch of the upper jaw may be correctly imitated, or even improved, which being lost, destroys the beauty of the finest set of features, causes the upper lip to fall in, and produces the appearance of old age in the youngest face."

I might also add the approbations of the Royal Society of Medicine, the Royal Academy of Surgery, and the opinions of several other physicians and surgeons; but these would exceed the limits of the present plan, and the reader would only receive an additional corroboration and repetition of the truths already delivered.

F I N I S.

N. B. The author informs the public, that he has lately invented a dining table, very commodious, both for the company and those who attend, as one servant can wait on twenty persons, without any inconvenience. The form of this table is such as to admit a stove in its centre, in the winter time, the heat of which can be diminished or increased at pleasure, to any degree that may be required, by means of an extinguisher or regulator, formed on a principle which may with very little expence be applied to all chimnies, grates, &c. The company at this table have the double advantage of never being incommoded by servants, because they stand in the front; and also, of keeping

their feet constantly warm, by means of the pipes through which the smoke passes, which are contrived to run under the table. The author having obtained his Majesty's Letters Patent for this invention, acquaints the public, that as his time is entirely taken up with his professional employments, he has intrusted the management of this business to Mr. De Valcour, to whom all persons are requested to apply concerning these articles, at No. 1, Frith-Street, Soho.

