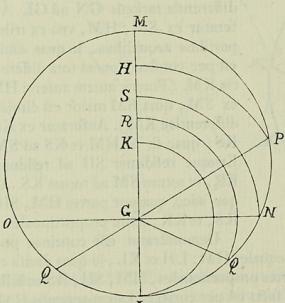


tes, SH, RS et KR. Quas dico esse proportionales. Eadem enim est ratio totarum trium partium HM, LH, et KL, ad quatuor totas partes HM, SH, RS et KR; quae ablatae HM, ad aequalem eius ablata HM. Erunt igitur duae hae reliquae partes LH et KL, ad tres has reliquae partes SH, RS et KR; vt totae tres illae partes, ad totas illas quatuor partes. Et resoluentur duae hae reliquae partes, in tres has reliquae partes, cädem ratione, quä tres illae partes resoluentur in quatuor illas partes. Sed tres illae partes resoluentur proportionaliter, per quatuor illas partes; quae demonstratae sunt proportionales. Ergo et duae hae reliquae partes resoluentur proportionaliter, per tres has reliquae partes; ratione eädem proportionales. At, quä ratione tres hae reliquae partes sunt proportionales; erit SH ad RS, vt RS ad KR. Sed demonstratum est HM esse ad SH, vt RS ad KR. Erit ergo HM ad SH, vt SH ad RS, per 11 quinti. Et quatuor lineae HM, SH, RS et KR, erunt continue proportionales. Habant itaque quatuor hae lineae eandem rationem ad totam differentiam KM, quam habent ad totam eandem, quatuor differentiae rationum quatuor harum similium, GM ad GP, GP ad GN, GN ad GQ, GQ ad GL. Quia enim KM, tota est differentia quatuor harum rationum similium. Et per 7 quinti, quatuor hae lineae, aequales erunt quatuor harum rationum differentis. Jmo quatuor hae lineae, differentiae ipsissimae erunt quatuor harum rationum similium. Quod ex appositâ figurâ clarissime apparebit.



duas esse medias, inuentas proportionales duabus datis AB et CD, quod fuerat propositum.

Erit ergo HM, differentia primae rationis GM ad GP. Nec non eadem HM, excessus erit, quo GM maior est GP. Sed eadem HM excessus etiam est, quo eadem GM maior est GH. Ablato ergo communi ambabus GH et GP, excessu HM: supererit GH aequalis GP. Atque GH facta fuit aequalis per constructionem, majori datae AB. Ergo et GP aequalis erit eidem majori datae AB.

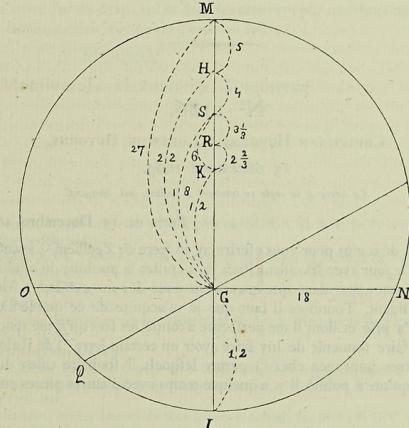
Demonstratis igitur duabus lineis GP et GI, aequalibus duabus datis AB et CD. Demonstratis itidem duabus GN et GO, mediis proportionabilibus duabus GP et GI. Demonstratum etiam erit, eisdem GN et GQ,

N° 1185.

CHRISTIAAN HUYGENS à [IS. DE LA PEYRE].

[DÉCEMBRE 1663.]

La minute se trouve à Leiden, coll. Huygens¹⁾.
La lettre est la réponse au N°. 1183.



GH 22 | Ergo KH. 10
GI 12 | et HM. 5
et GM. 27 | m.
GI 12 |

54
27
324 quadratum GN

¹⁾ La minute de cette lettre se trouve sur la quarrière page de la pièce N°. 1184; elle contient la réfutation du raisonnement de la pièce précédente.

GH. 22	eius radix 18
22	ergo GN. 18 m.
44	GM. 27
44	126
	36
quadratum GH 1484	minus quam 486 quadratum GP
Ergo GH minor quam GP.	

N° 1186.

CHRISTIAAN HUYGENS à LODEWIJK HUYGENS.

15 DÉCEMBRE 1663.

La lettre et la copie se trouvent à Leiden, coll. Haygens.

Paris ce 15 Decembre 1663.

Je n'ay pas de temps pour vous escrire ny au frere de Zeelhem¹⁾ ayant employé presque tout le jour avec Monsieur Petit²⁾, à ajuster la machine du vuide de Monsieur de Montmor que dans quelques jours nous devons exhiber a Monsieur le Premier Preident. Toutefois il faut que je m'acquiere de ce que le dit Sieur du Portail³⁾ m'a prié et dont il me perfecute a toutes les fois qu'il me rencontre qui est de vous faire souvenir de luy faire avoir un certain livre⁴⁾ de Raimond⁵⁾ et quelques autres imprimez chez⁶⁾ parmy lesquels il souhaite celuy des amours d'Alcandre qu'on a publiè il y a quelque temps avec d'autres pieces curieuses⁷⁾

¹⁾ Constantyn Huygens.²⁾ L'intendant des fortifications P. Petit.³⁾ P. Petit de la note 2.⁴⁾ Peut-être s'agit-il ici de l'ouvrage:

Delle Caccie di Eugenio Raimondi Bresciano Libri Quattro Aggiuntivi se questa nuova imprezzione, il Quinto Libro della villa. [In Napoli, Per Lazar Scoriggio. M.DC.XXVI. in-4°.]

⁵⁾ Eugenio Raimondi naquit vers la fin du seizième siècle et s'occupa surtout d'histoire naturelle.⁶⁾ Intercalez: vous.⁷⁾ Recueil de diverses Pieces, servant à l'Historie de Henry III., Roy de France et de Pologne; dont les titres se trouvent en la page suivante. A Cologne, chez Pierre Marteau. [ce sont des pseudonymes pour: Amsterdam, Elsevirij] MDCLXIII. in-12°.

Cet ouvrage, assez rare, contient les pièces suivantes:

Je vous prie promettez que vous le contenterez ou dites moy ce que je doibs luy respondre.

Vous aurez fceu du frere de Zeelhem⁸⁾ le bon succés de nos montres au voyage de Lisbone qu'ont fait les Anglois et je vous diray que j'ay trouué encore un changement notable dans la confruictiōn des horologes a pendule qui le fera aller beaucoup plus juste qu'auparavant⁹⁾. Monsieur Moray me mande une chose assez curieuse par sa dernière¹⁰⁾, c'eſt qu'ils ont en leur Société un diamant griseatre qui eſtant frotté ſu du drap, reluit dans les tenebres par quelque temps, comme la pierre de Boulogne calcinée qu'on a mife au soleil¹¹⁾.

A Monsieur

Monsieur L. HUGENS DE ZULICHEM.

I. Journal du Regne de Henry III. composé par M. S. A. G. A. P. D. P.
Ces lettres désignent:

Monsieur (Louis) Servin, Avocat général au Parlement de Paris. Il était fils de Madeleine Deschamps, naquit en Vendôme vers 1555 et mourut à Paris le 19 mars 1626 d'un coup d'apoplexie dont il fut frappé lors d'une dispute avec le roi Louis XIII. Il devint Avocat général au Parlement en 1589.

II. Le divorce Satyrique, ou les Amours de la Reynne Marguerite de Valois, sous le nom D. R. H. Q. M.

On attribua cette pièce à

Pierre Victor Palma de Cayet, né à Montrichard en 1515, et mort le 10 mars 1610. D'abord pasteur protestant, il devint catholique et, en 1600, prêtre. Il a beaucoup écrit, surtout sur l'histoire.

III. L'Alcandre, ou les amours du Roy Henry le Grand, par M. L. P. D. C. sur l'impreſſion de Paris de l'an 1651.

Ces lettres désignent:

Madame Louise (Marguerite de Lorraine), Princesse de Conty. Elle était la fille de Henri Ier de Lorraine, duc de Guise, dit le Balafré, et de Catherine de Clèves, naquit en 1574 et mourut à Eu le 30 avril 1631. Elle étaie de mœurs très-libres, mais spirituelle.

IV. La Confession de M. de Sancy, par L. S. D. A. auteur du Baron de Feneffe. L'auteur en est

Le Sieur (Theodore Agrippa) d'Aubigné, né le 8 février 1550 à Saint-Maury (Saintonge) et mort à Genève le 29 avril 1620. Protestant, il encourut plus d'un arrêt de mort. Réfugié à Genève, il épousa en 1626 Mademoiselle Burlamaqui.

⁸⁾ Consultez la Lettre N°. 1175.⁹⁾ Consultez la Lettre N°. 1178, note 16.¹⁰⁾ Consultez la Lettre N°. 1173.¹¹⁾ Voir la Lettre N°. 1193.

N^o 1187.

CHRISTIAAN HUYGENS à R. MORAY.

19 DÉCEMBRE 1663.

La lettre se trouve à Londres, Royal Society.

A Paris ce 19 Dec. 1663.

MONSIEUR

Ma derniere a esté du 9^e de ce mois ²⁾). Depuis j'ay receu la vostre du 26 Novembre ³⁾ avec le journal du Pendule dont je vous rends graces trefhumble. Vous dites dans vos notes qu'a toutes les fois que B s'arresta, l'on avoit alteré le petit plomb coulant ⁴⁾ , ce qui pourtant ne semble pas avoir lieu depuis le 3^e jusqu'au 30^e May car quoy qu'il se soit arresté par 2 fois dans ce temps la, la difference journalière a toujours continué de mesme a scauoir de $\frac{3}{4}$ de minute. J'espere que pour le nouveau voyage de Guinée et Jamaïque vous aurez donné ordre qu'on marque exactement tout ce qui arrive aux montres et tout ce qu'on y fait. Je m'estonne si Monsieur le Comte de Kincairdin a receu vostre lettre, comment il n'a pas encore respondu a de si agreables nouvelles. Le partage que nous fîmes ⁵⁾ du provenu de l'Invention de Longitudes en cas de success, fut qu'a chacun en appartiendroit la moitié luy l'ayant proposé ainsi, et moy ne luy voulant rien contester.

J'attens avec impatience les observations de Monsieur Boile ⁶⁾ touchant le Diamant. Quelques uns ont dit icy qu'on avoit écrit de la que la mesme chose arriva a tous autres diamants, ce qui ne scauroit etre véritable puisque l'experience montre le contraire. Nous avons essayé de faire l'experience de l'argent vif chez Monsieur de Montmor mais jufqu'icy fans succés ce qui arrive par ce qu'on n'y travaille qu'une fois chaque semaine. Hier pourtant le tube sembloit etre tres bien purgé, et le mercure ne laissa pas de descendre. Il y en a icy ⁷⁾ qui croient que la chose ne peut reussir que dans des tuyaux fort etroits, s'imaginant de scauoir la cause du phenomene, c'est pourquoj je vous prie de me faire scauoir exacte-

¹⁾ R. Moray répond à cette lettre le 28 décembre 1663; mais nous n'avons pas trouvé cette réponse.

²⁾ Voir la Lettre N^o. 1178.

³⁾ Nous n'avons pas trouvé cette lettre de R. Moray à Chr. Huygens: Moray y ajouta une copie plus détaillée de la pièce N^o. 1174, ainsi qu'il l'avait promis dans la Lettre N^o. 1173.

⁴⁾ Consultez la Lettre N^o. 1173.

⁵⁾ Consultez les Lettres N^os. 1167 et 1173.

⁶⁾ Voir la pièce N^o. 1194 et consulter la Lettre N^o. 1178, note 16.

⁷⁾ Entre autres Rohault. Consultez la Lettre N^o. 1178.

ment quelle est la grosseur de ceux dont se servent Milord Brounker et Monsieur Boyle ⁸⁾ , et si l'orifice est de mesme largeur que tout le reste. Je suis

MONSIEUR

Vostre trefhumble et trefobeisflant Seruiteur

CHR. HUGENS DE Z.

N^o 1188.

CONSTANTYN HUYGENS, frère, à CHRISTIAAN HUYGENS.

20 DÉCEMBRE 1663.

*La lettre et la copie se trouvent à Leiden, coll. Huygens.
Chr. Huygens y répondit par le N^o. 1189.*

A la Haye le 20 Decembre 1663.

Tout affairé que vous estes je me trouve obligé de vous charger encore de la commiffion d'une perrue à Calore. J'ay différé de prendre l'autre jusqu'à cette heure, mais ayant été fort incommodé du mal de dents depuis peu, qui m'amena en mesme temps une petite fièvre continue il y a six jours dont je ne suis pas encor tout a fait quitté, j'ay résolu d'hasarder le pacquet et de me faire rafra des que je pourrai sortir, et comme lon n'a pas assez d'une perrue, et que pour la campagne de nécessité il en faut une a callotte, je vous prie de m'en faire auoir une comme cela du mesme maître qui a fait l'autre ⁹⁾ , et ce qui est le principal de cheveux qui ayent de la friseure naturelle comme est la callotte de Monsieur van Leeuwen et comme je veux esperer que celle que j'ay est aussi, car quelques maître perruquier icy me la garantit telle, et un autre se donne au diable si cela est. L'experience le jugera. Je vous envoie un echantillon de mes cheveux et les trois mesures nécessaires. Je vous prie de faire haster le maître car vous voyez que je serois incommodé, et étant faite de l'envoyer encore par la poste a l'Unicus ¹⁰⁾.

⁸⁾ Consultez la Lettre N^o. 1171.

⁹⁾ Consultez la Lettre N^o. 1155.

¹⁰⁾ Philips Doublet.

ayant fait le prix avec le Courrier et dit ce que c'est; afin que la tentation ne luy vienne pour la troisième fois. Si vous voulez je payeray a ma foeur³⁾ icy ce que vous pourrez auoir debourssé pour moy sur autant moins de ce que vous luy devez pour la dentelle qu'elle a payé pour vous, ou bien ailleurs ou l'ordonnerez.

Jl me tarde extrêmement de scaouer ce que vous pouvez auoir adjouté à l'exactitude de l'horologe. si cela est le secret des longitudes malayement scauroit vous eschapper. Vous ne devriez cependant nous mander⁴⁾ cela si succintement sans dire a quelle partie de l'horologe cet amendement s'est fait au rouage au pendule aux cornes ou a quoy enfin.

Je vous prie de vous souuenir ce que je vous ay mandé⁵⁾ du cabinet de Jabach⁶⁾.

Une belle compagnie vient de sortir de la chambre de Toot⁷⁾; Buat⁸⁾, Cabellau⁹⁾, l'aifnée Dorp¹⁰⁾ et mademoiselle de Nieuveen¹¹⁾ en habit de garcon, pensez.

Dans mes precedentes¹²⁾ je vous ay quelques fois prié de me dire un peu quel mestier vander Does¹³⁾ fait en Angleterre et s'il tient boutique pour les hommest curieux, dans une lettre a Bisshop¹⁴⁾ il lui promet de vous informer par le menu et le secret qu'a le Prince Robert¹⁵⁾ pour grauer en eau forte¹⁶⁾ comme scauez, et ce afin que vous le montratz audt Bisshop, auquel il en a envoyé les instrumens il y a longtemps.

Pour mon Frere.

³⁾ Susanna Huygens.

⁴⁾ Consultez la Lettre N°. 1186, un frère Lodewijk Huygens.

⁵⁾ Consultez la Lettre N°. 1177, à un m^e allemand et son fils valparaisseur valence.

⁶⁾ Sur Jabach, voir la Lettre N°. 1177, note 5.

⁷⁾ Lodewyk Huygens.

⁸⁾ Henry de Fleury de Coulan. Voir la Lettre N°. 868, note 7.

⁹⁾ Jan Willem Cabeljaauw étais militaire; en 1674 il devint major de cavalerie.

¹⁰⁾ Dorothea van Dorp. Voir la Lettre N°. 272, note 4.

¹¹⁾ Elisabeth Maria Musch. Voir la Lettre N°. 196, note 5.

¹²⁾ Consultez la Lettre N°. 1159.

¹³⁾ Sur Jacob van der Does, voir la Lettre N°. 807, note 23.

¹⁴⁾ Sur Cornelis de Bisshop, voir la Lettre N°. 790, note 8.

¹⁵⁾ Sur le prince Ruprecht von Bayern, voir la Lettre N°. 1046, note 8.

¹⁶⁾ Consultez la Lettre N°. 1046.

N° 1189.

CHRISTIAAN HUYGENS à [CONSTANTYN HUYGENS, frère].

28 DÉCEMBRE [1663].

La lettre se trouve à Leiden, coll. Huygens.
Elle est la réponse au N°. 1188. Const. Huygens, frère, y répond par le N°. 1198.

A Paris ce 28 Décembre 1663.

Je vous prie de me charger d'aussi peu de commissions qu'il sera possible, sur tout de celles ou il faut debourser de l'argent, autrement je m'en vay faire serment de n'en accepter plus aucune.

Je m'effonne que vous ne scauriez trouuer a la Haye un perruquier assez habile pour vous faire une calote, puis que Monsieur de la Lecque¹⁾ et tant d'autres gens de bonne mine s'en contentent bien. Mais passe pour cette fois icy, pourueu que vous ne soiez pas fort preffe, car le maistre etant devenu indipofé depuis quelque temps jay esté moy mesme il y a plus de 6 sèmaines a le folliciter pour une semblable calote que je n'y pas encore. Ayez donc aussi foin de ce que je vous recommande qui est en premier lieu de procurer une bonne horologe a pendule a refort et sonnante de 24 heures pour le Mareschal de Grammont²⁾, mais que ce soit quelque chose de fort bon et bien traualle, et que le refort ait de la force, ce que vous pouuez juger aisement en la voiant marcher. S'il y en a de faites chez Severijn³⁾ ou Paschal⁴⁾ vous pourrez l'envoyer aussi tost, autrement donnez ordre qu'on en fasse, et recommandez la bien, car je voudrois en avoir de l'honneur. Je vous avois mandé⁵⁾ de faire tenir les 2 autres a Unicus⁶⁾, avec ordre de les charger sur les charettes qui partent d'Anvers pour Paris et cependant il me mande de les auoir envoiées de la a Bruxelles, a quoy il y a plus d'embarras, c'est pourquoy je voudrois qu'une autre fois vous les fassiez aller par l'autre voie. Secundo je vous prie de dire au plufbott a Severijn qu'il envoie par la premiere occasion l'horologe qu'il a faite pour Milord Brauncker, laquelle il adressera ainsi *To Alexander Blair at the signe of St. Andrews Croſ in Roodlane, London*⁷⁾, et qu'il vous le fasse scauoir quand elle fera partie a fin que j'en donne

¹⁾ Maurits Lodewyk, comte de Nassau la Lecq. Voir la Lettre N°. 863, note 8.

²⁾ Voir la Lettre N°. 999, note 13.

³⁾ Sur Severijn Oosterwijk, voir la Lettre N°. 1104, note 18.

⁴⁾ Sur Paschal, voir la Lettre N°. 955, note 7.

⁵⁾ Consultez la Lettre N°. 1175.

⁶⁾ Philips Doublet.

⁷⁾ Consultez la Lettre N°. 1173.

avis par de là. Mandez moy aussi si le dit Severijn a esté païe de l'horologe de Monsieur Bouillaud⁸⁾.

Pour ce qui est de ma nouvelle invention, vous me permettrez de la tenir secrete jusqu'a ce que je sois de retour pour y faire trauailler. cependant scachez que je ne change rien au pendule, et que cette nouveautē ne pourra pas s'appliquer aux horologes defia faites.

Je ne scay pas encore qui me pourra mener chez Jabach⁹⁾ mais je tascheray d'en trouuer. Il me reste encore bien de chofes a voir en cette ville, mais les jours font si cours et mes desseins si incertains par ce que je ne dispose pas de la vointure, que je ne puis quasi rien effectuer.

Le Sieur van der Does¹⁰⁾ en la Cour d'Angleterre a le Priuilege de pouvoir fournir luy feul des marchandises que l'on y jōue, les quelles il fait venir d'icy, et viennent par fois luy mesme en faire emplette. l'on dit que cela luy vaut de l'argent, mais en recompense il me semble que l'honneur en souffre beaucoup. Il ne m'a jamais parlé de ce trafficq, mais affer d'autres.

Je croiois qu'en envoiant les instruments a Monsieur Bisshop¹¹⁾ il luy avoit écrit en mesme temps de quelle façons il s'en faur servir. Le Prince Rupert¹²⁾ me l'a enseigné luy mesme¹³⁾ et la chose principale est de scavoir bien manier l'outil qui hache tout le fonds noir de la planche; lequel l'on remüe vifte de ca et de la en le tenant prestē avec deux doigts contre la planche, et en le faisant avancer peu a peu, ainsi que font les fweertvegers als se het yfer hacken om op free vergulden¹⁴⁾.

N° 1190.

CHRISTIAAN HUYGENS à LODEWIJK HUYGENS.

28 DÉCEMBRE 1663.

La lettre et la copie se trouvent à Leiden, coll. Huygens.

A Paris ce 28 Décembre 1663.

Je vous felicite de vostre reconvalescence, vous en estes quite a affer bon marché pour la faison ou nous sommes.

⁸⁾ Consultez les Lettres Nos. 1175 et 1177.

⁹⁾ Voir la Lettre N°. 1177, note 5.

¹⁰⁾ Voir la Lettre N°. 807, note 13.

¹¹⁾ Voir la Lettre N°. 790, note 8.

¹²⁾ Voir la Lettre N°. 1046, note 8.

¹³⁾ Consultez la Lettre N°. 1046.

¹⁴⁾ Traduction: les fourbisseurs quand ils hachent le fer pour le dorur sur tranche.

Je vis hier le bon Seigneur du Portail¹⁵⁾, qui ne manqua pas de me demander comme tousjours des nouvelles de ses liures¹⁶⁾, et fut païe par la response que vous avez trouuée. La Mariane¹⁷⁾ se porte bien depuis quelque temps, et n'ayant pu ouvrir la bouche pour parler pendant sa maladie, ny quasi point les dents, elle s'en recompense si bien maintenant par une loquacité demeurée qu'il n'y a pas moyen d'y durer. Elle a toujours cette devotion en teste et le desslein du matnafere, ce qui la rend forte et scrupuleuse, et je n'y voy point de remede.

Il feroit mal aiffé de vous expliquer ce que j'ay trouué¹⁸⁾ pour amender les pendules, et outre cela il ne feroit pas bon que l'on y travaillat en mon absence mais je m'affire que vous trouuerez mon invention fort jolie, quand je vous viendray l'expliquer.

J'auray soin de vostre escritoire, mais s'il vous plait envoiez moy si peu de commisions que faire se pourra. Je mande¹⁹⁾ la mesme chose au frere de Zeelhem²⁰⁾. C'est mon antipathie, et le Sieur Sebastien²¹⁾ ne sera pas longtemps absent, qui ne peut viure fans en auoir.

Je croiois vous avoir defia mandé que Sorbiere²²⁾ en arrivant icy, dit avoir perdu en chemin le livre des Insectes²³⁾ s'effant amusé a y lire en chemin faifant, et dans les hostelleries. Il voitoit bien que je n'eltois gueres fatiffait de cette excuse et me donna en suite une lett're a son beaupere Renaud²⁴⁾ par laquelle il luy eferit d'en acheter un autre. J'espere que le frere de Zeelhem aura fait rendre la dite lett're, et vous pourriez bien faire demander a ce voisin s'il a quelque chose a envoier a Sorbiere, pour l'en faire souuenir. Je n'ay pas encore vu Monsieur Thevenot qu'une fois a Ifsy où il se tient jusqu'a cet heure, des qu'il fera revenu je luy feray tenir les lett'res de Coxinha que Sorbiere m'a donnees pour cette fin. Sa disgrace²⁵⁾ s'eft passée tout doucement, les raports qu'on auoit fait de ses extra-

¹⁵⁾ P. Petit.

¹⁶⁾ Consultez la Lettre N°. 1186.

¹⁷⁾ Marianne Petit.

¹⁸⁾ Consultez la Lettre N°. 1178, note 16.

¹⁹⁾ Consultez la Lettre N°. 1189.

²⁰⁾ Constantyn Huygens, frere.

²¹⁾ Sebastian Chieze. Voir la Lettre N°. 863, note 4.

²²⁾ Sur Sorbiere, voir la Lettre N°. 12, note 5.

²³⁾ Sur l'ouvrage de J. Goedart, „Metamorphosis Naturalis“, voir la Lettre N°. 1054, note 10.

²⁴⁾ Sur Daniel Renaud, voir la Lettre N°. 980, note 1.

²⁵⁾ Sur ce sujet on trouve le passage suivant dans les Proceedings de la séance du 21 octobre (V.st.).

At the meeting of the Society, an account was given by Mr. Oldenburg, the secretary, of a letter written to him from Paris October 12, 1663, N. S. by Monsieur Peter Petit, a member of the Monymorian academy at Paris, defining in the name of the said academy to be informed from the society, what had been the transfaictions of Monsieur De Sorbiere amongst them, when he was present at their meetings, and in particular, whether he had pretended to

vagances en Angleterre ne s'etant pas trouue trop veritables. Le beaufrere¹²⁾ vous aura donne de sia quelque esclaircissement touchant nostre machine de poste. Il y a quelques jours que je n'ay vu aucun des interessez, mais je croy que celle qu'on fait pour exhiber au Roy doit estreachevee.

L'on m'a dit que Monsieur van Rede¹³⁾ espouse l'une des Somer-

be by the said academy deputed to establish a stricter correspondence. Monsieur Petit observed, that Monsieur Sorbiere had no orders from the academy, having gone to England without acquainting any person, except Monsieur De Montmor, with his intended journey thither; and that the academy would not have been guilty of so great an incivility, as sending him without a letter to the society and the president, if they had had any intention of deputing Monsieur De Sorbiere for the establishing a nearer correspondence: nor was the academy pleased with his printing a discourse, after he had been deputed and had promised not to do it. The society upon hearing the account of this letter declared, that the said Monsieur De Sorbiere had pretended to no such deputation, nor transacted any thing with them in the name of the Parifian academy; and it was ordered, that the secretary shoulf signify this in his answer to Monsieur Petit; which he did in a letter in French of the 30th of this month, in which he observed, that Monsieur De Sorbiere had, at the meetings of the society, behaved himself with all possiblie civility, and, in his private conversation with the members, only testified his zeal for the advancement of solid and useful science; on which account, as well as that of his being of the Parifian academy, he had been admitted into the Royal Society the same day with Monsieur Huygens. Mr. Oldenburg added, with regard to a stricter correspondence between the society and academy, that it did not appear to him to want the being enforced by formal deputations; since the nature of the thing required it, the object of science being of so vast an extent, that it demanded the united genius of more than one nation to exhaust the subject.

Dans les mèmes Proceedings on trouve encore la note:

Monsieur De Sorbiere being informed of the charge against him of having assumed the character of deputy from the academy of Monsieur de Montmor to the Royal Society, wrote a letter to Mr. Oldenburg from Paris on the 5th of December 1663, N. S. appealing to him for his justification in that article, expressing at the same time his high sense of the honour done him by the Royal Society, in electing him into their body; . . . Mr. Oldenburg, in his answer, dated at London January 3, 1664, sent him the substance of his letter to Monsieur Petit.

¹²⁾ Philips Doublet.

¹³⁾ Godard van Reede, fils de Godard Adriaan van Reede et de Margaretha Turnor, comte d'Athlone, baron de Reede, Ginkel et Agrim, seigneur d'Amerongen et de Lievendaele,

dycs¹⁴⁾, Monsieur d'Odyck¹⁵⁾ Mademoiselle van der Nisse¹⁶⁾, mandez moy s'il est vray, et ce que fait Buat¹⁷⁾ avec l'amie¹⁸⁾.

Pour le frere LOUIS.

N^o 1191.

IS. DE LA PEYRERE à [CHRISTIAAN HUYGENS].

[DÉCEMBRE 1663].

La lettre se trouve à Leiden, coll. Huygens.

J'ay repansé à ce dont ie vous demanday l'esclaircissement il y a quelques jours. Et il me famble, Monsieur, que ie le demontre dans l'escrit¹⁹⁾ que ie vous envoyoyes. Je n'en croiray pourtant rien que vous ne l'ayez aprouué²⁰⁾. Et si vous l'aprouuez, ie pouffray la chose plus avant. Et vous envoieray au premier jour vn Probleme, dom la demonstration vous surprandra si ie ne me trompe. Je suis absolument a vous.

LA PEYRERE etc.

N^o 1192.

A. AUZOUT à CHRISTIAAN HUYGENS.

[DÉCEMBRE 1663¹).]

La lettre se trouve à Leiden, coll. Huygens.

Monsieur Hugens est supplié damener avec luy a deux heures son petit chirurgien²²⁾ avec les instrumens nécessaires pour erater vn chien ou deux & pour

mourut à Utrecht en février 1705. Il était militaire, ami intime du roi Willem III, et devint général de cavalerie. Il épousa Ursula Philippina van Raesfeldt, dame de Middachten.

¹⁴⁾ Les vieilles demoiselles van Aerßen. Voir la Lettre N^o. 829, note 10.

¹⁵⁾ Willem Adrianus van Nassau. Voir la Lettre N^o. 909, note 4.

¹⁶⁾ Sur Cornelis van der Nisse, voir la Lettre N^o. 1162, note 4.

¹⁷⁾ Sur H. de Fleury de Coulan, voir la Lettre N^o. 808, note 7.

¹⁸⁾ Elisabeth Maria Musch, Mademoiselle de Nieuween, épousa Buat le 3 mars 1664.

¹⁹⁾ Peut-être la pièce N^o. 1184.

²⁰⁾ D'une lettre de 1665, dans laquelle de la Peyrere parle de ses „folies”, il semble résulter que Huygens était parvenu à le convaincre.

²¹⁾ Comme il s'agit ici des assemblées chez Habert de Monmor, qui avaient été interrompues par des décess de famille, cette lettre doit avoir été écrite en décembre 1663. Consultez la Lettre N^o. 1186, du 15 décembre.

²²⁾ Bruinsteen, chirurgien de l'ambassade. Voir la Lettre N^o. 1104, note 9.

Œuvres. T. IV.

montrer les Glandules Saliuaires de Warthon³⁾ dans vne teste de beuf ou de veau, ou de lenuoier chez Monsieur de Montmor il ny peut pas venir parceque nous ne pouuons pas faire aujourdhuy les experiences de chymie que lon auoit refoulues. nous en ferons aussi quelques vnes dans la machine si elle va bien⁴⁾ & jenuoie chez Monsieur Petit afin quil aporte son miroir de refraction pour voir si nous pourrons faire celle de la Paftille. il faut tacher d'occuper les assemblées a ce recommandement et ie croy Monsieur que vous prendrez plaisir dy contribuer
cest votre tres obeissant serviteur

AUZOUT.

Nous pourrons aussi faire la disfection dun eil de beuf pour tacher de voir si lon peut se passer de cristallin comme quelques vns croient.

Pour Monsieur HUGENS.

N° 1193.

R. BOYLE à R. MORAY.

[DÉCEMBRE 1663.]

La lettre a été publiée dans „Boyle's Works, Vol. II“.

A Copy of the Letter, that Mr. BOYLE wrote to Sir Robert MORRAY, to accompany the Observations¹⁾ touching the Shining Diamond.

SIR,

Though Sir Robert Morray and Monsieur Zulichem be persons, that have deserved so well of the commonwealth of learning, that J shoud think myself un-

³⁾ Thomas Wharton, d'une famille noble de Yorkshire, mourut le 14 novembre 1673. Après avoir étudié la médecine à Cambridge et à Oxford, où il reçut son degré le 8 mai 1647, il se rendit à Londres, s'y créa une pratique étendue et devint lecteur au Gresham College. On lui doit la découverte des conduits salivaires, qui portent son nom. Voir son ouvrage: *Adenographia: sive, Glandularum totius Corporis Descriptio. Author: Thomā Whartono Adenographia: sive, Glandularum totius Corporis Descriptio. Author: Thomā Whartono M. D. & Coll: Lond: Socio. Londini, Typis J. G. Impensis Authoris. M.DCLVI. in-8°.*

⁴⁾ Lisez: bien.

¹⁾ Voir la pièce N°. 1194.

worthy to be looked upon as a member of it, if J declined to obey them, or to serve them; yet J shoud not without relunctancy send you the notes¹⁾ you desire for him, if J did not hope, that you will transmit, together with them, some account, why they are not less unworthy of his perusal: which that you may do, J must inform you, how the writing of them was occasioned, which in short was thus.

As J was just going out of town, hearing that an ingenious gentleman of my acquaintance²⁾, lately returned from Italy, had a diamond, that being rubbed, would shine in the dark, and that he was not far off; J snatched time from my occasions to make him a visit; but finding him ready to go abroad, and having in vain tried to make the stone yield any light in the day-time, I borrowed it of him for that night, upon condition to restore it him within a day or two at furthest, at Grefham College, where we appointed to attend the meeting of the society, that was then to be at that place. And hereupon J hastened that evening out of town, and finding after supper, that the stone, which in the day-time would afford no discernable light, was really conspicuous in the dark, J was taken with the novelty, and so desirous to make some use of an opportunity, that was like to last so little a while, that though at that time J had no body to affit me but a foot-boy, yet fitting up late, J made a shift that night to try a pretty number of such of the things, that then came into my thoughts, as were not in that place and time unpracticable. And the next day, being otherwife employed, J was fain to make use of a droufy part of the night to set down hasty in writing what J had observed; and without having the time in the morning to stay the transcribing of it, J ordered the observations to be brought after me to Grefham College; where you may remember, that they were, together with the stone itself, shewn to the Royal Society by which they had the good fortune not to be disliked, though severall things were, through haste, omitted, some of which you will find in the margin of the inclosed paper. The substance of this short narrative J hope you will let Monsieur Zulichem know, that he may be kept from expecting any thing of finifhed in the obervations, and be disposed to excuse the want of it. But such as they are, J hope they will prove (without a clinch) luciferous experiments, by setting the speculations of the curious on work, in a diligent inquiry after the nature of light, towards the

²⁾ Sir Robert Clayton, fils d'un charpentier, naquit le 29 septembre 1629 à Bulwick (Northamptonshire) et mourut le 16 juillet 1707 à Marden (Surrey). Il devint riche en février 1682 par la succession de son ami l'admiral John Morris; cependant, déjà avant ce temps il était homme d'influence dans les corporations de Londres. En 1671 il fut élu sheriff et en 1679 lord-mayor. Chef du parti protestant, il entra comme tel dans le parlement en 1678. Il épousa en 1659 Martha Trott. Souvent il assista de ses richesses la maison royale.

discovery of which, perhaps, they have not yet met with so considerable an experiment; since here we see light produced in a dead and opaque body, and that not as in rotten wood, or in fishes, or as in the Bolonian stone, by a natural corruption, or by a violent destruction of the texture of the body, but by so flight a mechanical operation upon its texture, as we seem to know what it is, and as is immediately performed, and that several ways, without at all prejudicing the body, or making any sensible alterations in its manifest qualities. And I am the more willing to expose my hasty trials to Monsieur Zulichem, and to you, because he, being upon the consideration of dioptricks, to odd a phenomenon relating to the subject, as probably he treats of, Light, will, I hope, excite a person to consider it, that is wont to consider things he treats of very well. And for you, Sir, I hope you will both recruit and perfect the observations you receive; for you know, that J cannot add to them, having a good while since restored to Mifter Clayton the stone, which, though it be now in the hands of a prince ³), that so highly deserves, by understanding them, the greatest curiosities; yet he vouchsafes you that access to him, as keeps me from doubting, you may easily obtain leave to make further trials with it, of such a monarch as ours, that is not more inquisitive himself, than a favourer of them that are so. J doubt not but these notes will put you in mind of the motion you made to the society, to impose upon me the task ⁴⁾ of bringing in what J had on other occasions observed concerning shining bodies. But though J deny not, that J sometimes made observations about the Bolonian stone, and tried some experiments about some other shining bodies; yet the same reasons, that reduced me then to be unwilling to receive even their commands, must now be my apology for not answering your expectations, namely, the abstruse nature of light, and my being already overburdened, and but too much kept employed by the urgency of the pres^ts, as well as by more concerning and diffracting occasions. But yet J will tell you some part of what J have met with in reference to the stone, of which J send you an account. Because J find, on the one side, that a great many think it no rarity, upon a mistaken persuasion, that not only there are a store of carbuncles, of which this is one; but that all diamonds, and other glittering jewels, thine in the dark. Whereas, on the other side, there are very learned men, who (plausibly enough) deny, that there are any carbuncles or shining stones at all.

And certainly, those judicious men have much more to say for themselves, than the others commonly plead; and therefore did deservedly look upon Mister

³⁾ Le roi Charles II avait obtenu ce diamant pour ses collections.

⁴⁾ Dans la séance du 11 novembre 1663 (V. st.).

Clayton's diamond as a great rarity. For not only Boëtius de Boot⁵⁾, who is judged the best author on this subject, ascribes no such virtue to diamonds, but begins what he delivers⁶⁾ of carbuncles, with this passage; *Magna fanna est carbunculi. Is vulgo putatur in tenebris carbonis inflar lucere; fortassis quia pyropus seu anthrax appellatus à veteribus fuit. Verum haec nemo unquam vere affere ausus fuit; se gemmam noctu lucentem vidisse. Garcias ab Horto⁷⁾ proregis Indiae mediecius refert⁸⁾ se allocutum fuisse, qui se vidisse affirmaret. Sed si fidem non habuit⁹⁾.* And a later author, the diligent and judicious Johannes de Læct¹⁰⁾ in

⁵⁾ Anselmus Boethius de Boodt, (de Boot, Boethius), fils de Guillaume de Boodt et de Jeanne Voet, naquit vers 1550 à Bruges, où il mourut le 21 juin 1632. Docteur en droit, il devint conseiller pensionnaire de Bruges, puis conseiller et médecin de l'empereur Rudolf II; en 1612 il revint à Bruges. Il a laissé des ouvrages d'histoire naturelle, surtout sur les pierres précieuses.

④ Anfelmii Boetii de Boodt Brugensis Belgae, Rydolphi Sevndi, Imperatoris Romanorum, Perfume Medicis, Genmarovi et Lapidum Historia. Qua non solum ortus, natura, vis & preictum, sed etiam moetus quo ex sis, olea, fala, tinturae, esentialae, arcana & magisteria arte chymica confici possint, ostenditur. Opvs Principibvs, Medicis, Chymicis, Physicis, ac liberalioribus ingenii utilitimum. Cum variis figuris, Indiceq; duplici & copioso. Hanoviensi, Typis Wechelianis apud Claudium Marinum & heredes Iohannis Aubrii. m.DC.XIX. in 4^o.

⁷⁾ Garcia del Orta (*Garcia ab Horro*, *Garcia del Huerto*, *Garcie du Jardin*) avait étudié à Salamanque, et fut professeur de mathématiques à Lisbonne. En 1534 il partit pour les Indes Orientales sous le titre de physior mor (médecin en chef) du roi de Portugal. En 1563 il publia à Goa les résultats de trente ans d'observations assidues; son ouvrage a été souvent réimprimé et traduit en d'autres langues.

8) Colóquios dos simples, e drogas he couzas medicinais da India, e affi dalgumas frutas achadas nella onde se tratam algas couzas trancas amedindas, praticam e outras couzas boas, para faber copfotos pelo Doutor garçia dotta: sifco do Rey noſo feñor, viſtos pelo muyto Reuerendo feñor, ho licenciado Alexos diaz: falcam defenbargador da caſa da supriçâa iniquifidor neffas partes. Com priuilegio do Conde viſo Rey. Imprefo em Goa, por Ioan-nes de endem a X dias de Abril de 1563: annos.

xii pages (non-numérotées) et 217 feuillets (numérotés in rétro) in-4°.
La bibliothèque de Leiden possède un exemplaire des mieux conservés. On en a, entre autres, la traduction latine de Clusius:

Aromatvm, et SimpliciVm aliquot Medicamentorum apud Indos nacentium Historia: Primum quidem Lufitanica lingua per Dialogos conscripta, à D. Garcia ab Horto, Proregis Indiae Medico: Deinde Latino sermone in Epitome contracta, & iconibus ad vitum exprimita, locupletioribus; annotatiunculis illustrata a Carolo Clivio Attrebat. Tertia Editio. Antverpiae, Ex Officina Philippi Plantini, Architypographi Regis, cl. lxxix, in-8°.

⁹⁾ Johannes de Laet naquit à Anvers le 17 janvier 1593, et mourut vers la fin de 1649 à Leiden. Etabli à Leiden en 1624, il y publia son ouvrage sur les Indes Orientales, dont il y a plusieurs éditions et traductions; puis il écrivit une série de monographies géographiques. Contre Golius il soutint une polémique sur les peuples aborigines de l'Amérique. En 1633 il était devenu directeur de la Compagnie des Indes.

his chapter of carbuncles and of rubies, has this passage¹⁰⁾: *Quia autem carbunculi, pyropi & anthraces à veteribus nominantur, vulgo creditum fuit, carbonis inflar in tenebris lucere, quod tamen nullū gemmā hūc temere deprehēsum, licet à quibusdam temere jaēetur.* And the recentest writer J have met with on this subject, Olaus Wormius¹¹⁾, in his account¹²⁾ of his well-furnished Musaeum, does, where he treats of rubies, concur with the former writers by these words: *Sunt, qui rubinum veterum carbunculum esse exsilitant, sed deest una illa nota, quia in tenebris inflar anthracis non lucent: Ait talem carbunculum in rerum naturā non inventari major pars, authorum exsilitant. Licet unum aut alterum in India apud magnates quosdam reperiiri scribant, cum tamen ex aliorum relatione id habeant falso, sed tali non viderint¹³⁾.* In confirmation of which I shall only add, that hearing of a ruby, so very vivid, that the jewellers themselves have several times begged leave of the fair lady, to whom it belonged, that they might try their choicest rubies by comparing them with that, J had the opportunity, by the favour of this lady and her husband, (both which J have the honour to be acquainted with) to make a trial of this famous ruby in the night, and in a room well darkned, but

¹⁰⁾ Ioannis de Laet Antwerpianus De Gemmis et Lapidibus Libri duo. Quibus praemittitur Theophrasti Liber de Lapidibus. Graece & Latine. Cum brevibus Annotationibus, Lugduni Batavorum. Ex Officina Ioannis Maire, Anno 1610-1611, in-8°.

Ce traité se trouve à la suite de l'ouvrage suivant:

Gemmum et Lapidum Historia. Quam olim edidit Anselmus Boetius de Boot, Brugensis, Rudolphii II. Imperatoris Medicus. Polten Adrianus Tollus, Lugg. Bat., M. D., reconfit; figuris melioribus, & Commentariis pluribus illustravit, & Indice auxit multo locu pletiore. Tertia Editio longe purgatissima. Cui accedunt Ioannis de Laet, Antwerpianus, De Gemmis & Lapidibus libri II. Et Theophrasti liber De Lapidibus, Gr. & Lat. cum brevibus notis. Lugduni Batavorum. Ex Officina Ioannis Maire, cl. 1610-1611, in-8°.

¹¹⁾ Olaus Worm, fils d'un bourgmestre d'Arnhem, issu d'une ancienne famille de la Gueldre, naquit le 13 mai 1588 à Arnhem et mourut le 7 septembre 1654 à Copenhague. Ayant fait ses études en théologie et en médecine, il voyagea par toute l'Europe. Il fut nommé à l'université de Copenhague en 1613 professeur de belles lettres, en 1615 de grec, en 1624 de médecine.

¹²⁾ Museum Wormianum, Seu Historia Rerum Rariorum, tam Naturalium, quam Artificia- lium, tam Domesticarum, quam Exoticarum, quae Hafniae Danorum in aedibus Authoris fer- vantur. Adornata ab Ola Worm, Med. Doct. &, in Regia Hafniensi Academia, olim Pro- fessore publico. Variis & accuratis Iconibus illustrata. Lugduni Batavorum, Ex Officina Elzeviriorum, Acad. Typographi, cl. 1610-1611, in-folio.

Cet ouvrage posthume fut publié par son fils :

Wilhelm Worm, né le 11 septembre 1633 à Copenhague, où il mourut en 1704. Ses études en médecine achevées, il voyagea pendant onze ans, et devint en 1660 professeur de physique, puis de médecine, à Copenhague. Plus tard, il fut nommé bibliothécaire du roi et historiographe, et en 1690 président du tribunal suprême.

not only could not discern any thing of light, by looking on the stone before any thing had been done to it, but could not, by all my rubbing, bring it to afford the least glimmering of light.

But, Sir, though I be very backward to admit strange things for truths, yet J am not very forward to reject them as impossibilities; and therefore J would not discourage any from making further inquiry, whether or no there be really in rerum natura any such thing as a true carbuncle or stome, that without rubbing will shone in the dark. For if such a thing can be found, it may afford no small assistance to the curious in the investigation of light, besides the nobleness and rarity of the thing itself. And though Vartomanus¹⁴⁾ was not an eye-witness of what he relates¹⁴⁾ that the king of Pegu, one of the chief kings of the East-Indies, had a true carbuncle of that bigness and splendour, that it shined very gloriously in the dark; and though Garcias ab Horto, the Indian Vice-Roy's physician, speaks of another carbuncle, only upon the report of one, that he discoursed with, who affirmed himself to have seen it; yet as we are not sure, that these men, that gave themselves out to be eye-witnesses, speak true, yet they may have done so for ought we know to the contrary. And J could present you with a much considerabler testimony to the same purpose, if J had the permission of a person concerned, without whose leave J must not do it. I might tell you, that Marcus Paulus Venetus¹⁵⁾ (whose supposed fables¹⁶⁾ divers of our later travellers and navigators have since found to be truths) speaking of the king of Zeilan, that then was, tells¹⁷⁾ us, that he was said to have the best ruby in the world, a palm long, and as big as a man's arm, without spot, shining like a fire; and he subjoins, that the Great Cham, under whom Paulus was a considerabler officer, sent and offered the value of a city for it; but the king answered, he would not give it for the treasure of the world, nor part with it, having been his ancestors. And J could add, that in the relation made by

¹³⁾ Luigi Barthema (Varthema, Vartomanus) naquit vers 1480 à Bologne et mourut à Rome. S'étant voué à la pyrotechnie et à l'art de fondre les canons, il alla, en 1507, voyager en Afrique, en Asie et dans les Indes Orientales. Il publia une relation de ses voyages, qui a été imprimée et traduite plusieurs fois.

¹⁴⁾ Itinerario de Ludovico de Varthema Bolognese ne lo Egypto, ne la Suria, ne la Arabia de- ferta et felice, ne la Persia, ne la India, et ne la Ethiopia. La fede, el viuere et costumi de le prefate province. Et al prefente aggiointo alcune Isole nouamente ritrovate.

A la fin, on lit : Stampata in Venetia per li heredi de Georgio di Rufconi. Nell'anno della incarnatione del nostro signor Iesu Christo. M.D.XXII. a d.XVII. de Setembre. Regnado lo incito Principe Antonio Grimano, à deux colonnes in-8°.

¹⁵⁾ Sur Marcus Paulus Venetus, voir la Lettre N°. 772^a, note 26 (Supplément, Tome III).

¹⁶⁾ Sur l'ouvrage „Delle Meraviglie del Mondo“, voir la Lettre N°. 24, note 15.

two Ruffian Cossacks¹⁷⁾ of their journey into Catay¹⁸⁾, written to their emperor¹⁹⁾, they mention their having been told by the people of those parts, that their king¹⁹⁾ had a stone, which lights as the sun both day and night, called in their language Sarra, which those Cossacks interpret a ruby. But these relations are too uncertain for me to build any thing upon; and therefore I shall proceed to tell you, that there came hither, about two years since, out of America, the governour of one of the principal colonies there, an ancient virtuoso²⁰⁾, and one that has the honour to be a member of the Royal Society: this gentleman, finding some of the chief affairs of his country committed to another and me, made me divers visits; and in one of them, when I inquired what rare stones they had in those parts of the Indies he belonged to, he told me, that the Indians had a tradition, that in a certain hardly accessible hill, a pretty way up in the country, there was a stone, which in the night-time shined very vividly, and to a great distance; and he assured me, that though he thought it not fit to venture himself so far among those savages, yet he purposelē sent thither a bold Englishman, with some natives, to be his guides; and that this messenger brought him back word, that at a distance from the hillock he had plainly perceived such a shining substance as the Indians tradition mentioned; and being stimulated by curiosity, had slighted those superstitious fears of the inhabitants, and with much ado, by reason of the difficulty of the way, had made a shift to clamber up to that part of the hill, where, by a very heedful observation, he supposed himself to have seen the light. But whether 'twere, that he had mistaken the place, or for some other reason, he could not find it there; though when he was returned to his former station, he did again see the light shining in the same place where it shone before. A further account of this light I expect from the gentleman, that gave me this, who lately sent me the news of his being landed in that country. And though I reserve to myself a full liberty of believing no more than I see cause, yet I do the less scruple to relate this, because a good part of it agrees well enough with another story, that I shall in the next place have occasion to subjoin: in order whereunto, I shall tell you, that though the learned authors I formerly mentioned, tell us, that no writer has

¹⁷⁾ Clement Obozkin de Tobolsk et Burnash Nikomene, qui le 6 juillet 1619 partirent de Cathay pour Moscou.

¹⁸⁾ Michael Feodorovitch Romanow, fils du patriarche de Moscou Feodor Romanow et d'une religieuse, Marthe, naquit le 12 juillet 1596 et mourut le 13 juillet 1645. Le 21 février 1613 il fut proclamé, le premier, tzar de toutes les Russies.

¹⁹⁾ Tambur, le „roi d'or“ de Cathay.

²⁰⁾ Sur Francis Willoughby, gouverneur de Barbados, voir la Lettre N°. 1126, note 9. Dans la séance du 4 décembre 1661 (V. st.) il fut admis dans la Société Royale.

affirmed his having himself seen a real carbuncle, yet, considering the light of Mister Clayton's diamond, it recalled into my mind, that some years before, when J was inquisitive about stones, I had met with an old Italian book²¹⁾ highly extolled to me by very competent judges; and that, though the book was very scarce, I had purchased it at a dear rate, for the sake of a few considerable passages I met with in it, and particularly one, which being very remarkable in itself, and pertinent to our present argument, J shall put it for you, though not word for word, which J fear J have forgot to do, yet as to the sense, into English.

„Having promised, (lays our author²²⁾), to say something of that most precious sort of jewels, carbuncles, because they are very rarely to be met with, we shall briefly deliver what we know of them. In Clement the VIth's²³⁾ time J happened to see one of them at a certain Ragusan merchant's, named Beigoio di Bona: this was a carbuncle white, of that kind of whiteness, which we said was to be found in those rubies, of which we made mention a little above,” (where he had said that those rubies had a kind of livid whiteness, or paleness, like that of a Calcidonian), „but it had in it a lustre so pleasing, and so marvellous, that it shined in the dark, but not as much as coloured carbuncles; though it be true, that in an exceeding dark place J saw it shine in the manner of fire almost gone out. But as for coloured carbuncles, it has not been my fortune to have seen any: wherefore J will only set down what J learned about them, discoursing in my youth with a Roman gentleman of ancient experience in matters of jewels, who told me, that one Jacopo Cola being by night in a vineyard of his, and spying something in the midst of it, that shined like a little glowing coal, at the foot of a vine, went near towards the place, where he thought himself to have seen that fire; but not finding it, he said, that being returned to the same place, whence he had first desir'd it, and perceiving there the same splendor as before, he marked it so heedfully, that he came at length to it, where he took up a very little stone, which he carried away with

²¹⁾ Due Trattati di Benvenuto Cellini Scultore Fiorentino, uno dell' Oreficeria, l'altro della Scultura. Firenze, Panizzi e Peri, 1568. in-8°.

²²⁾ Benvenuto Cellini naquit en 1500 à Florence, où il mourut le 13 février 1571. C'est le célèbre artiste qui travailla d'abord sous le pape Clemente VII. Celui-ci l'envoya à Charles-Quint: mais il passa à François 1er, après avoir été emprisonné par le pape Paolo III sur l'accusation d'avoir détourné des pierres précieuses de la tiare. François 1er lui donna pour atelier la tour de Nesle. Par suite d'une intrigue de la duchesse d'Estampes, il dut quitter la France, et alla se mettre sous la protection de Cosmo de Medicis. En 1558 il se fit prêtre, mais en 1560 il jeta le fr̄et et se maria.

²³⁾ Giulio de Medicis naquit à Florence et mourut le 25 septembre 1534 à Rome. Il fut chevalier de Malte, grand-prieur de Capoue, devint en 1513 archevêque de Florence, cardinal, chancelier de l'Eglise Romaine, et en 1523 pape sous le nom de Clemente VII.

transports and joy. And the next day, carrying it about to shew it divers of his friends, whilst he was relating after what manner he found it, there easly intervened a Venetian embassador, exceedingly expert in jewels, who presently knowing it to be a carbuncle, did craftily, before he and the said Jacopo parted, (so that there was no body present, that understand the worth of so precious a gem) purchase it for the value of ten crowns, and the next day left Rome to shun the being necessitated to refore it; and, as he affirmed, it was known within some while after, that the said Venetian gentleman did, in Constantinople, sell that carbuncle to the then Grand Signior²⁴⁾, newly come to the empire, for a hundred thousand crowns.”)

And this is what J can say concerning carbuncles; and this is not a little at least to the first part of this account, where our Cellini affirms himself to have seen a real carbuncle with his own eyes, especially since this author appears wary in what he delivers, and is inclined rather to lessen, than increase the wonder of it. And his testimony is the more considerible, because though he were born a subject neither to the pope nor the then king of France, (that royal virtuoso Francis I.²⁵⁾) yet both the one and the other of those princes employed him much about making of their noblest jewels. What is now reported concerning a shining substance to be seen in one of the islands²⁶⁾ about Scotland, were very improper for me to mention to Sir Robert Morray, to whom the first information²⁷⁾ was originally brought, and from whom J expect a farther (for J scarce dare expect a convincing) account of it. But J must not omit, that some virtuoso questioning me the other day at Whitehall about Mifter Clayton’s diamond, and meeting amongst them an ingenious Dutch gentleman²⁸⁾ whose father²⁹⁾ was long embassador for the Netherlands in England, J learned of him, that he is acquainted with a person, whose name he told, (but J do not well remember it) who was

²⁴⁾ Selim II, fils du sultan Soliman le Magnifique et de Roxelane, naquit en 1524 et mourut le 12 décembre 1574 à Constantinople. Il succéda à son père en 1566.

²⁵⁾ François Ier, fils de Charles comte d’Angoulême et de Louise de Savoie, naquit à Cognac le 12 septembre 1494 et mourut à Rambouillet le 31 mars 1547. Il protégeait les arts et les sciences.

²⁶⁾ Cette petite île écossaise, tout près de l’île Conwall, appartenait alors à Lady Reay.

²⁷⁾ Dans les séances du 11 et du 18 novembre 1663 (V. st.).

²⁸⁾ Johan Boreel, chevalier-baronnet, baron de Vreemdyke, Steelant et Peereboom, seigneur de Duynbeke, Westhove et Domburg, fils ainé de Willem Boreel et de Jacoba Carels, naquit à Amsterdam le 29 octobre 1627, et mourut le 19 mars 1691. Il appartenait à la cour des princes d’Orange, devint colonel-lieutenant d’infanterie, en 1681 commandant de Putten, en 1685 commandant de Brielle. Il épousa Amarantha van Vredenburgh.

²⁹⁾ Sur Willem Boreel, voir la Lettre N°. 63, note 6.

admiral of the Dutch in the East-Indies, and who assured this gentleman, Monsieur Boreel, that at his return from thence, he brought back with him into Holland a stone, which though it looked but like a pale dull diamond, such as he saw Monsieur Clayton’s to be, yet was it a real carbuncle; and did without rubbing shone so much, that when the admiral had occasion to open a chest, which he kept under deck in a dark place, where it was forbidden to bring candles for fear of mischances, as soon as he opened the trunk, the stone would, by its native light, shone so as to illustrate a great part of it. And this gentleman having very civilly and readily granted me the request J made him, to write to the admiral, who is yet alive in Holland, (and probably may still have the jewel by him), for a particular account of this stone, J hope ere long to receive it; which will be the more welcome to me, not only because so unlikely a thing needs a clear evidence, but because J have had some suspicion, that (supposing the truth of the thing) what may be a shining stone in a very hot country, as the East-Indies, may perhaps cease to be so (at least in certain seasons) in one as cold as Holland. For J observed in the diamond J send you an account of, that not only rubbing, but a very moderate degree of warmth, though excited by other ways, would make it shone a little. And it is not impossible, that there may be stones as much more susceptible than that, of the alterations requisite to make a diamond shone, as that appears to be more susceptible of them than ordinary diamonds. And J confess to you, that this is not the only odd suspicion, (for they are not so much as conjectures), that what J tried upon this diamond suggested to me. For not here to entertain you with the changes J think may be effected even in harder sort of stones, by ways not vulgar, nor very promising, because J may elsewhere have occasion to speak of them, and this letter is but too prolix already; that which J shall now acknowledge to you is, that J began to doubt, whether there may not in some cases be some truth in what is said of the right turquois, that it often changes colour as the wearer is sick or well, and manifestly loses its splendour at his death. For when J found, that even the warmth of an affliction, that lasted not above a quarter of a minute, nay, that of my body, (whose constitution, you know, is none of the hottest) would make a manifest change in the solidest of stones, a diamond; it seemed not impossible, that certain warm and saline streams, issuing from the body of a living man, may by their plenty or paucity, or by their peculiar nature, or by the total absence of them, diversify the colour and the splendour of so soft a stone as the turquois. And though J admired to see, that J know not how many men, otherwise learned, should confidently ascribe to jewels such virtues, as seem no way compatible to inanimate agents, if to any corporeal ones at all; yet as to what is affirmed concerning the turquois changing colour, J know not well how to reject the affirmation of so learned (and which in this case is much more considerible) so judicious a lapidary as Boetius de Boot^f) who upon his own particular and repeated experience delivers so memorable a narrative of the turquois’s changing

colour, that J cannot but think it worth your perusal; especially since a much later and very experienced author, Olaus Wormius³⁰), where he treats of that stone, confirms it with this testimony³¹): *Imprimis memorandum exemplum, quod Anselmus Boetius de scipio resert, iam mutati coloris quam à casu preservacionis. Cai & ipse haud diffimile adferre possum, nisi ex Anhelmo petrum quis putaret.* J remember, that J saw two or three years since a turquoise (worn in a ring) wherein there were some small spots, which the virtuoso, whose it was, assured me he had observed to grow sometimes greater, sometimes less, and to be sometimes in one part of the stone, sometimes in another. And J having encouraged to make pictures from time to time of the stone, and of the situation of the cloudy parts, that so their motion may be more indisputable, and better observed, he came to me about the middle of this very week, and assured me, that he had, as J wished, made from time to time schemes or pictures of the differing parts of the stone; whereby the several removes and motions of the abovementioned clouds are very manifest, though the cause seemed to him very occult. These pictures he has promised to shew me, and is very ready to put the stone itself into my hands. But the ring having been the other day causally broken upon his finger, unless it can be taken out, and set again without any considerable heat, he is loth to have it meddled with, for fear its peculiarity should be thereby destroyed. And possibly his apprehension would have been strengthened, if J had had opportunity to tell him what is related by the learned Wormius³²) of an acquaintance of his, that had a nephritic stone, of whose eminent virtues he had often experience even in himself, and for that cause wore it still about his wrist; and yet going upon a time into a bath of fair water only, wherein certain herbs had been boiled, the stone, by being wetted with this decoction, was deprived of all its virtue, whence Wormius takes occasion to advertise the sick, to lay by such stones, whenever they make use of a bath. And we might expect to find turquoise likewise, easily to be wrought upon in point of colour, if that were true, which the curious Antonino Neri³³), in his ingenious Arte Vetraria³⁴) teaches³⁵ of it; namely, that turquoise discoloured, and grown white, will regain and acquire an excellent colour, if you but keep them two or three days at most covered with oil of sweet almonds, kept in a temperate

³⁰) Voir la note 14.

³¹) Antonio Neri, né à Florence, était un chimiste du seizième siècle. Il se fit prêtre, et visita beaucoup de laboratoires de chimie, où il travailla comme simple employé. Il s'occupa surtout de la verrerie et des pierres précieuses.

³²) L'Arte Vetraria Diffinita in Libri Sette. Del R. P. Antonio Neri Fiorentino. Ne quali si scoprono, effetti maravigliosi, & s'insegnano segreti bellissimi, del Vetro nel Foco, & altre cose curiose. All' Ultimo et Excellmo Sig. il Sig. Don Antonio Medici. In Firenze Nella Stamperia de' Giunti. M.DC.XII. Con licenza de Superiori. in-4°.

heat by warm ashes: J say, if it were true, because J doubt whether it be so, and have not as yet had opportunity to satisfy my self by trials; because J find, by the confession of the most skilful persons, among whom J have laid out for turquoises, that the true ones are great rarities, though others be not at all so. And therefore J shall now only mind you of one thing, that you know as well as J, namely, that the rare stone, which is called *Oculus Mundi*, if it be good in its kind, will have so great a change made in its texture by being barely left a while in the lanugine of liquors, common water, that from opacous it will become transparent, and acquire a lustre, of which it will again be deprived, without using any other art or violence, by leaving it a while in the air. And before experience had satisfied us of the truth of this, it seemed as unlikely, that common water or air should work such great changes in that gem, as it now seems that the effluvia of a human body should effect lesser changes in a turquoise, especially if more susceptible of them, than other stones of the same kind. But both my watch and my eyes tell me, that it is now high time to think of going to sleep; matters of this nature will be better, as well as more easily, cleared by conference than writing. And therefore since J think you know me too well to make it needful for me to disclaim credulity, notwithstanding my having entertained you with all these extravagances; for you know well, how wide a difference J am wont to put betwixt things, that barely may be, and things that are; and between those relations, that are but not unworthy to be inquired into, and those that are not worthy to be actually believed; without making apologies for my ravings, J shall readily comply with the drowsiness, that calls upon me to release you: and the rather because Monsieur Zulichem being concerned in your desire to know the few things J have observed about the shining stone; to entertain those with suspicions, that are accustomed not to acquiesce but in demonstrations, were a thing, that cannot be looked upon as other than very improper by,

StR

Your most affectionate and
most faithful servant
R. Boyle.

^{a)} Note marginale.

Boetius de Boot. Gem. & Lapid. Histor. Lib. 2 Cap. 8 [Boyle].

^{b)} Note marginale.

Musei Wormiani, Cap. 17 [Boyle].

^{c)} Note marginale.

Purchas Pilgrim, lib. 1 cap. 4, pag. 104 [Boyle].

L'auteur désigne ici l'ouvrage, maintenant fort rare, „Haklyvtvs Pothymvs,” dont le titre est:

Purchas his Pilgrimes. In five Bookes. The first, Contayning the Voyages and Peregrinations made by ancient Kings, Patriarkes, Apostles, Philosophers, and others, to and tho-

row the remoter parts of the knowne World: Enquiries alfo of Languages and Religions, especially of the moderne diuerified Professions of Chritianitie. The fecond, A Description of all the Circum-Navigations of the Globe. The third, Navigations and Voyages of Englishmen, alongst the Coasts of Africa, to the Cape of Good Hope, and from thence to the Red Sea, the Abassine, Arabian, Perian, Indian, Shores, Continents, and Islands. The fourth English Voyages beyond the East Indies, to the Islands of Japan, China, Cauchinchina, the Philippiae with others, and the Indian Navigations further prosecuted: their iust Commerce, nobly vindicated against Turkifi Treacherie; victoriouly defended against Portugall Hostilitie; gloriouly advanced against Moorish and Ethnicker Perfudie; hopefully recovering from Dutch Malignite; iustly maintayned againt ignorant and malitious Calumnie. The fifth, Navigations, Voyages, Traffiques, Discoueries, of the English Nation in the Easterne parts of the World: continuing the English-Indian occurrents, and containing the English Affaires with the Great Samorine, in the Perian and Arabian Gulfs, and in other places of the Continent, and Islands of and beyond the Indes; the Portugall Attempts, and Dutch Difafers, diuers Sea-fights with both; and many other remarkable Relations. Vnde Deus Vna Veritas. London, Printed by William Stanby for Henrie Fetherstone, and are to be sold at his Shop in Pauls Church-yard at the signe of the Rose. 1625. in-folio.

^{d)} Note marginale.

In the year 1619. [Boyle].

^{e)} Note marginale.

Benvenuto Cellini nell' Arte del Gioiellare. lib. 1, pag. 10. [Boyle].

^{f)} The narrative in the author's own words, is this: [note de Boyle].

Ego (says he) sancte affirmare possum me unam aureo annulo inclusam perpetuo gestare, cuius faculatem (si gemmae est) nunquam fatis admirari potui. Gestaverat enim ante triginta annos Hispanus quidem non procul à paternis aedibus habitans. Is cum vitâ funestâ, & ipsius supellex (ut moris apud nos est) venum exposita esset, inter caetera etiam turcois exponebatur. Verum nemo (licet complures eo concurrens, ut eam propter coloris elegantiam, quam vivo domino habuerat, emerent) sibi emptam voluit, pristinum enim nitorum & colorem prorsus amiserat, ut porus malachites, quam turcois videretur. Adebat tunc temporis gemmace habendae desiderio etiam parens et frater meus, qui antea saepius gratiam & elegantiam ipsius viderant, mirabundi eam nunc tam esse deformem: emit eam nihilominus pater, fatisque vili pretio, qua omnibus contemptu erat, ac praefentes non eam esse quam Hispanus gestarat, arbitrarentur. Domum reversus pater, qui tam turpem gemmam gestare fibi indecorum putabat, eam miliu domo dat, inequiis; Quandoquidem, fili mi, vulgi fama est, turcoideum, ut facultates suas exercere possit, dono dari debere, tibi eam devoveto: ego acceptam gemmam sculpori trado, ut gentilitia mea insignia illi, quemadmodum fieri solet, in jaspide chalcedonio, aliisque ignobilioribus gemmis inculperet. Turpe enim exsiccabam, hujusmodi gemma ornatus gratia, dum gratiam nullam haberet, uti. Paret sculptor, redditique gemman, quam gesto pro annulo signatoria, vix per mensem gesserat, reddit illi pristinum. Micolor, sed non ita nitens propter sculpturam, ac inaequalem superficiem. Mirarum omnes gemmam, atque id praecepue, quod color indies pulchrior fieret.

Id quia observabam, nunquam fere eam à manu disposui, ita ut nunc adhuc eandem gestem.

^{g)} Note marginale.

Olaus Wormius in Musaeo. 18 pag. 186 [Boyle].

^{h)} Note marginale.

Musaeum Worm. pag. 99 [Boyle].

ⁱ⁾ Arte Veteraria, lib. 7, cap. 102 [Boyle].

N^o 1194.

R. BOYLE à R. MORAY.

[1663].

Appendice au N^o. 1193.

La piece se trouve à Leyden, coll. Huygens.

Observations made the 27th of October 1663

on Mr. Clayton's Diamond.

1. Being looked on in the day-time, though in a bedd, whose curtains were carefully drawne, J could not discerne it to shine at all, though well rubb'd; but about a little after Sun-set whilst the Twilight yet lasteth, nay this morning a pretty while after Sun-rising, (but before J had been abroad in the more freely enlightened air, of the Chamber) J could upon a light affriction, easily perceiue the Stone to shine within the Curtains of my Bed.
2. The Candles being removed, J could not in a dark place differnce the Stone to haue any light when J looked upon it, without having before rubbed or otherwife prepared it.
3. By two white Pebbles, though hard rubb'd againt one another, nor by the long and vehement affriction of rock-Chryfall againt a peice of red Cloath, nor yet by rubbing two diamonds set in a ring, as J had rubb'd this Stone, J could not produce any sensibile degree of Light.
4. J found this Diamond hard enough, not onely to enable me, to write readily with it upon Glasse, but to graue upon rock-Chryfall it selfe.
5. J found this to haue like other Diamonds an Elecrical faculty.
6. Being rubb'd upon any Cloaths, as is usuall for the Exciting of Amber, Wax, and other Electrical Bodies, it did in the dark manifly shone like rotten-wood, or the Scales of Whitings and other purified fish.
7. But this Conficcupinieuse was fainter, then that of the Scales and Slabber (if J may so call it) of Whitings, and much fainter than the light of a Glow-