

# Tinseau D'amondans, Charles De l

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(*b.* Besançon, France, 19 April 1748; *d.* Montpellier, France, 21 March 1822)

*mathematics.*

The sixth of the seven children of Marie-Nicolas de Tinseau, *seigneur* of Gennes, and Jeanne Petramand of Velay, Tinseau belonged to the nobility of the Franche-Comté. Admitted to the École Royale du Génie at Mézières in 1769, he graduated as a military engineer at the end of 1771 and until 1791 was an officer in the engineering corps. Gaspard Monge, his professor of mathematics at Mézières, awakened in Tinseau an interest in mathematical research; and in 1772 he presented two memoirs to the Académie des Sciences, one on infinitesimal geometry and the other on astronomy. The following year he was named Bossut's correspondent at the Academy; but after that he seems to have written only one paper, on infinitesimal geometry. Nevertheless, the few items that have survived from his correspondence with Monge before the Revolution attest to a continuing interest in mathematical research.

A participant in the efforts made by the nobility in 1788 to defend the *ancien régime*, Tinseau joined the émigrés gathered at Worms under the leadership of the prince of Condé in 1791. From then on, he lived in various émigré communities, conducting a very active propaganda campaign against the Revolution and later against the Empire. He attempted to organize uprisings in France, and encouraged and aided the Allied powers in their fight against the French armies. Tinseau also fought in several campaigns and, according to his biographer, provided all the coalitions formed until 1813 with strategic plans of the French army. The intransigence of his anti-Revolution convictions is evident in the dozen political pamphlets that he published between 1792 and 1805 at Worms and London.

Devoted to the Bourbons, whom he considered the sole legitimate dynasty, Tinseau refused an offer of amnesty from Napoleon and rejected offers of naturalization extended by the British government. With the rank of brigadier general in the engineering corps, Tinseau acted as aide de camp to the future [Charles X](#) and did not return to France until 1816, at which time he immediately went into retirement.

Tinseau married three times. His first marriage took place in France before the Revolution, the other two in England during his exile. His four children from the first marriage all died without issue. From his third marriage he had a son who died in Africa and a daughter who married the engineer and mathematician François Vallès (1805–1887).

Two of the three memoirs that constitute Tinseau's *oeuvre* deal with topics in the theory of surfaces and curves of double curvature: planes tangent to a surface, contact curves of circumscribed cones or cylinders, various surfaces attached to a space curve, the determination of the osculatory plane at a point of a space curve, problems of quadrature and cubature involving ruled surfaces, the study of the properties of certain special ruled surfaces (particularly conoids), and various results in the [analytic geometry](#) of space. In these two papers the equation of the tangent plane at a point of a surface was first worked out in detail (the equation had been known since Parent), methods of descriptive geometry were used in determining the perpendicular common to two straight lines in space, and the [Pythagorean theorem](#) was generalized to space (the square of a plane area is equal to the sum of the squares of the projections of this area on mutually perpendicular planes).

Although Tinseau published very little, his papers are of great interest as additions to Monge's earliest works. Indeed, Tinseau appears to have been Monge's first disciple.

## BIBLIOGRAPHY

I. Original Works. Tinseau's two memoirs on infinitesimal geometry were published as "Solution de quelques problèmes relatifs à la théorie des surfaces courbes et des lignes à double courbure," in *Mémoires de mathématique et de physique présentés . . . sçavans*, **9** (1780), 593–624; and "Sur quelques propriétés des solides renfermés par des surfaces composées des lignes droites," *ibid.*, 625–642. An unpublished memoir dated 1772, "Solution de quelques questions d'astronomie," is in the archives of the Académie des sciences.

Between 1792 and 1805 Tinseau published many violently anti-Revolution and anti-Napoleonic writings, eleven of which are cited in Michaud (see below).

I. Secondary Literature. The only somewhat detailed article on Tinseau, by Weiss in Michaud's *Biographie universelle*, XL VI (Paris, 1826), 100–102, deals mainly with his political and military careers. Some observations on his mathematical work are in R. Taton, *L'oeuvre scientifique de Gaspard Monge* (Paris, 1951). see index; and C. B. Boyer, *History of Analytic Geometry* ([New York](#), 1956), 207. Various documents concerning Tinseau are in his dossiers in the archives of the Académie des Sciences and at the Service Historique de l'Armée.

RenÉ Taton