## September 9, I899.

a time.stamp for mercantile use
In many lines of business it is a matter of great importance to record the exact time of acts, operations or transactions, and to note upon papers and articles of various kinds the time of receipt or departure. A simple stamp by means of which such tumes can be recorded has been placed upon the market by Samuel H. Hogg son \& Company, of 27 Thames Street, New York city, and possesses certain features of construction not un interesting from a mechanical point of view
The time-stamp comprises essentially a watch held in a body supported above a printing base. The printing base is provided with two recessed printing dials. Minute and hour shafts respectively extend within the recesses of the minute and hour dials and have print ing hands normally resting above the dials. By means of gearing the minute and hour shafts are so connected with the watch mechanism that the minute and hour hands of the shafts are made to rotate in unison with the corresponding hands of the watch.

The body of the stamp, in which the watch is carried, is yieldingly supported above the printing base and is movable with the timeprinting hands. The parts are so assembled that when the base carrying the dials is pressed against a piece of paper, the printing hands in the dial recesses can be forced into contact with the paper by depressing the body of the stamp. The time thus stamped upon the paper will coincide with the time indicated by the watch.
The hour dial, it will be observed, has two series of twelve graduations each. Owing to the arrangement of these graduations, it is unnecessary to provide any changing device to denote the "A. M.," "P. M.," and "M." divisions of the twenty-four hours, for it is immediately apparent that the upper half of the dial denotes day and the lower half night
In operation the stamp is pressed upon an inked pad, then upon the article to be marked, a very slight pressure sufficing to insure a legible impression, giving year, wonth, day and minute, together with any wording desired around the dials. The stamp is only $41 / 2$ inches high, and weighs but 10 ounces.

## A CONTRAST in NOSES by r. lydeeker.

Of all the features of the human countenance, none seems more prone to exhibit marked variations in size and shape than the nose. A broad and flattened nose is characteristic of negroes, whereas the classic or Grecian nose is found only among the Caucasian races of Europe. But while the nasal organs of the races of Europe. But while the nasal organs of the
lower races of mankind differ in general from those of the higher peoples of Western Europe, yet it is among the latter that perhaps the greatest amount of variation in this repect may be noticed. And although even among these mixed Western nations a considerable amount of such nasal variability is evidently hertditary and distinctive of particular families or races, yet there are many instances in which it appears largely individual, although it may, of course, be due to reversion. Be this as it may, it will suffice for our present purpose to note that among European races a distinctly "snub-nosed," or "tip-tilted," type is not uncommon on the one extreme, while at the other we have what is commonlo called the "long-nosed" type; the latter being broadly distinguished from the arched Roman, or aquiline nose Now, it is a remarka Now, in atural his ble fact in natural hisory that whereas the great majority of the monkeys and apes of the Old World have noses of an ordinary pattern, that is to say, not very far removed from the type characterizing the inferior representatives of the human race, three of them have developed peculiarities in this respect which entitle them to be regarded as among the most extraordinary of all four-footed beasts. And not the least remarkable circumstance in connection with these nasal eccentricities is that the two extremes are found in members of a single group inhabiting widely distant and completely isolated areas.

I.-Proboacia Moakoy.

Before referring to the species displaying these remarkable peculiarities, it will be well to briefly refer to their nearest relatives. These are most familiarly known by the sacred Hanuman monkey, or Langur, of India, which is one of a large group of species inhabiting most of the Oriental countries ; one kind, the Himalayan Langur, being found at a considerable elevation in the outer hills of the mighty range from which it takes its name. And in winter, or eariy spring, these large gray monkeys may frequently be seen disporting themselves among pines heavily laden with snow. As distinctive features of the Langurs, reference may be made to their slim build, long hind legs and tail, and the absence of pouches in the cheeks for the storage of food. Their hair is long and coarse, and may be of any

color from slaty gray to bright foxy red or black. All have, for monkeys, fairly_well-formed noses, of ordinary dimensions. Unlike the majority of the members of their order, they feed on leaves in preference to fruits; and, as showing how similarity of habit gives rise to similarity of structure (or, if the reader so pleases, vice versa), it is interesting to note that the Langurs have complex stomachs, strikingly similar to those of sheep and ruminants in general ; most other monkeys having simple stomachs of the normal type.

As already mentioned, the three species of monkeys which have gone in for eccentric nasal development are near relatives of the Langurs. The first of these, which has been known in Europe since 1781, is an inhabitant of Borneo, where, be it observed, there are also true Langurs with normal noses. As may be seen from our figure (1), which represents a male in the Natural History Museum, the Proboscis monkey, as the species is called, is characterized by the inordinate length of the nasal organ of the adult male, which projects several inches in front of the line of the mouth, and gives to the whole physiognomy a most grotesque appearance. So remarkable, indeed, is the face of this monkey, that the first view of a stuffed specimen suggests to the beholder that it has been "faked," after
the fashion of the "bogus" animals formerly manufactured by our Japanese friends. The nostrils are situated on the under surface of the tip of this ungainly proboscis, and are separated from one another by an extremely narrow partition. In the case of the female the degree of nasal development is considerably less; and in the young of both sexes the nose is comparatively short, with the nostrils visible from the front, instead of being directed downward. In point of size the Proboscis monkey is a comparatively large animal, the length of the head and body of the adult male being about thirty inches, and that of the tail some three inches less. Its color is likewise conspicuous and striking, the upper parts, with the exception of a light band across the loins, being brilliant chestnut, and the face, which is fringed with long yellowish hair, a reddish flesh color.
Far more brilliant in color is the first of the two Tibetan species which exhibit the opposite type of nasal eccentricity in the Langur group. But these snub-nosed monkeys, as they may be appropriately called, are fully as large as the Bornean species, and as they are of much stouter build, both as regards body and limbs, they look considerably bigger. Instead of a proboscis-like development of nose, these two very peculiar monkeys have their nasal organs bent suddenly upward at a sharp angle to the line of the face, so that the nostrils are fully visible from the front, the whole aspect of the face being curiously piquant. The species here figured-the orange snub-nosed monkey-was first made known to European science by the French missionary, Abbe David, who obtained specimens while traveling in the province of Moupin, in Eastern Tibet. Some of his specimens are preserved in the Zoological Museum at Paris, and the colored plate of a female has long been the only ffigure available to naturalists. Thanks, however, to an energetic English naturalist resident in China the Natural History Museum has recently acquired a pair of these hitherto little known monkeys, our pair of these hitherto little known monkeys, our
figure being taken from the male, which has been mounted for exhibition, and will form one of the most attractive specimens in the large monkey case. Since our photograph does not attempt chromatic effect, it is necessary to mention that the general color of the upper parts is rich olive brown, flecked with yellow, and suffused with rufous, while the sides of the face. the lower part of the forehead, and the under parts are brilliant yellowish orange, tending to full orange on the face, the naked portions of which are pale blue. Across the loins there is a light patch comparable to that of the Proboscis monkey, the tail being proportionately rather shorter than in the latter, with a distinct tendency toward a club shape. Altogether, the appearance of the animal is highly peculiar, both from the point of view of form and of coloration. The head, for example, in addition to its "tip-tilted" nose, is noticeable for its extreme massiveness, which gives an almost leonine appearance. And this general massiveness is equally observable in the limbs, which are relatively shorter than in the true Langurs the feet being especially heavy and broad, with their toes almost concealed by long hair.

And here the atten tion of the reader may be directed to the circumstance that animals inhabiting cold countries (and Sze-chuan, where the British Museum specimens were obtained, can be very cold) are almost always much more heavily and substantially built than their relatives from warmer climes. An ex cellent instance of this phenomenon is afforded by the case of tigers in the same collection; the Bengal tiger being a long, lanky beast, while its cousin from Mongolia is a heavily built creature, with extraordinarily massive limbs.
Of course the longer hair of the Central Asi. atic animal tends to ex aggerate its general massiveness, which, however, would be perfectly apparent even without this extraneous aid. Possibly a stout and heary build, especially as regards the limbs, may aid in pro-
tecting the circulatory system from the effects of ex treme cold.

As regards the habits of the Orange snub-nosed mon key, our information is of the most meager description, These animals are stated, however, to congregate in troops of considerable size, and to ascend the tallest trees (the part of Tibet they inhabit being more or less wooded) in search of fruits, which they much prefer to leaves. When pressed by hunger, leaves and the ten der shoots of bamboo are said to form their staple nutriment. Bearing in mind this alleged partiality for fruits, it would be most interesting to determine whether the stomach of these monkeys is as complex as that of the true Langurs.
In view of the recent acquisition by the British Museum of the first specimens of the Orange species o snub-nosed monkeys ever seen in the country, it is no a little curious that it was last year that the professors of the Paris Museum were enabled to publish, with excellent colored plates, the description of a new species of the same gronp, also coming from Tibet and the adjacent districts of Northwestern China.
This new species, which may be popularly known as the slaty snub-nosed monkey, is fully as large as its more brilliantly-colored relative, which it also resem bles in the form of its nose. The tail is, however, much more bushy, and long-haired throughout. And while the color of the upper parts and outer and front sur faces of the limbs is dark slaty-brown, the cheeks, un der parts, and thighs are mostly pure white; the naked portions of the face being flesh-colored.

The specimens of the slate-colored species in the Paris Museum were obtained in the northwest extremity of Yun-nan, on the left, bank of the river Mekong in the neighborhood of Yerkalo, and it seems eviden that the species inhabits the crest of the long range separating the valley of the Mekong from that of the Yang-tse-kiang. During the summer it is probable that they frequent that side of the range which overlooks China, while their winter quarters would appear to be the side directed toward Tibet. The native name of Tchru-tchra, or snow-monkey, sufficiently indicates the severity of the climate of the region they inhabit. Probably the Blue River forms the line of division between the distributional areas of the slaty and the Orange species, the latter being found in Southern Kansu, Northern Sze-chuan, and Moupin.
Despite their long isolation from the sphere of European science, one, if not both, of these peculiar monkeys seems to have been known to the Chinese from time immemorial, for in a work entitled Shan-HoiKing, or "Mountain and Sea Record," which has been supposed to date from more than two thonsand years B. C., a so-called man of the Heu Yeung kingdom appears. from its tip-tilted nose, to be one or other of the species under consideration.
In the foregoing remarks we have treated the three species of monkeys with eccentric nasal development merely as zoological curiosities. But it will be evident to every thinking mind that there must be a reason for such strange departures from the normal, and until we discover such reason we cannot be said to know anything worth knowing about these animals. Unseeing these monkeys in their native haunts have not assisted us in this matter; and as neither the Proboscis assisted us in this matter; and as neither the Proboscis
Monkey nor the Snub-nosed Monkers have, we believe, hitherto been exhibited in confinement, there is an absolute lack of information in regard to this allimportant point. And that the problem cannot be solved by guessing on the part of the stay-at-home naturalist may be regarded as practically certain. At the present day, owing partly to the anxiety to describe new species, and partly to the desire to obtain specimens of every animal for our museums, there appears a great tendency for intelligent explorers and travelers to degenerate from field naturalists into mere collectors. And the pity of this is too obvious to need more than mention. It is indeed of ten said that it is most important to obtain specimens of species before they become extinct ; but the discovery of the raison d'étre of the tip-tilted nose of the Tibetan monkeys, or of the proboscis-like organ of their Bornean cousin, would be a thousand times more valuable than the asquisition of untold specimens of either. And even the re-cently-acquired knowledge of the existence of the second species of Snub-nosed Monkey pales into unimportance when contrasted with the unsolved problem. By all means, then, let all those who have the opportunity put mere collecting into a very subsidiary place. and devote all their energies to the solution of problems of this nature (and their name is legion) before it becomes forever too late.
After what has been said as to the necessity of actual observation to determine the reason for the peculiar nasal development of these monkeys, it would obviously be out of place to attempt to solve the problem in any other way. Attention may, however, be directed to the circumstance that the Chiru, or Tibetan antelope, has a remarkably swollen and puffy nose. And although the Saiga antelope, of the plains of Central Russia, has an equally remarkable nasal development, yet it seems highly probable that in the
case of the Chiru, at any rate, the enlarged size of the nasal chamber and nostrils is correlated with the rarefied atmosphere of the elevated plateau on which that ruminant dwells. The Snub-nosed Monkeys, although are yet "well up in the world"; and since the shape of the nose in the former would appear designed to admit the passage of as much air as possible with the least impossible impediment, the suggestion that the habitat has something to do with the nose-structure may perhaps be suggested. As to the reason for the genesis of the ungainly proboscis of the Bornean mon key, we have not even the rudiment of a theory to offer our readers.-We are indebted to Knowledge, of London, for the above interesting article.

## The Ornamentation of Books.

The printed page-that is to say, the page printed from movable type, whether directly or through the intermediary stage of a stereotype plate-is almost of necessity less interesting than the manuscript page or that printed from an engraved plate. The difference is very obvious when one compares the title page of a book of the Elzevir folio size with the pages of the text. The title page will have been printed from an engraved plate of copper, and in it the letters will be composed with a great deal of care for each special character, and also with thought for the line, for the paragraph, for the effect of the whole page, an effect, not, as in modern bookwork, of conventional varying lengths of lines and varying sizes of letters, but with a serious thought for general decorative appearance of the whole. A page of the text will show, indeed, some attempt at design on the part of the typefound er ; and herewith begins a brief inquiry into a small but most attractive detail.
The typefounders of Italy dropped at once the monkish character, the Gothic character, the angular and difficult though picturesque letter of the monastic scriptoria. They took the characters whose forms were furnished them by the Roman inscriptions; and as they had little archeological discrimination, they ming led together in an equal worship characters of the first and of the fourth centuries A.D. They adopted, however, from the medieval stock in trade some of thos curious abbreviations which make the manuscript page of the fifteenth century a misery to unpracticed transcribers. In such a book as, for instance, the very beautiful book of 1483, " Roberti Voltury De Re Militari," almost ary succeeding three or four lines will supply the curious student of letter form with from two to half a dozen picturesque abbreviations, vary ing from the simple scroll-shaped bar which, coming above a vowel, marks the suppression of a consonant exactly as the modern French circumflex accent marks the place where of old an $s$ had completed the wordfrom this to the capital $R$ with a diagonal mark across it, to the $Q$ with a mark across its tail and a double bar above it, to the $P$ with its rounded top ending in a characteristic scroli, and to the double $p$ of two kinds the one looking like a Greek $\varphi$, all of which signify each its own special abbreviated syllable. To this must be added the attractive variety of the larger letters, for there are more shapes of the capital $T$ and the capital $C$ than one of each. This, however, is but a very moderate instance of variety in letter forms Phroughout the fifteenth and sixteenth centuries the habit of varying the shapes of the letters prevailed, and may often be thought to have grown in forc rather than to have declined. A book as late as the "Ancient Germany" of Philip, Cluvier (1631) is a mine of interesting detail to the student of letter forms Ignoring the engraved title page, one finds in the book proper Roman, Italic and Greek characters mingled in a most remarkable fashion on every separate page, partly in the way of quotations from the numerous authors by compilation from whose works the book was pieced together; and then the Dedication to the Estates of Holland is in one and a very peculiar let er, while the Preface to the Reader is in a different type again. It need hardly be said that the tables of contents, the "Argumenta Rerum" and the "Index Rerum," as well as the Greek sonnet addressed to the author and signed by no less potent a name than tha of Daniel Heinsius, are all in typography of separate and very artistic character. There is still, however a modification to be insisted on, and that is that the differences among the forms of the same letter which we find to exist in Italian typography become here, in the Dutch book, extraordinarily numerous. A memo randum made many years ago seems to have been lost but recollection seems to say that twenty forms of the capital $C$ and nearly as many of other letters, large and small, are discoverakle in the text. The Italic characters allow of this variety more than do the more formal Roman characters, but in these last the diver sity exists. And it must be observed that the same page, the same paragraph, the same sentence, gives us instances of these differences. Thus, the long $f$ and the long $s$ are intended to be exactly alike except for the cross-bar; but the $s$ 's are unlike among themselves, and so are the $f s$, and taking the two letters together, six varieties are discoverable in a sentence.

The two letters $f \boldsymbol{i}$, made in one piece, as they often are in modern times, exist in three varieties; the double $s$, made of two long $s$ 's cast in one type; the $c t$ in one piece ; the capital $A$ and the capital $M$, with long, sweeping, curved up-strokes at the beginning, and with a scroll at the top meant for ornament alone; the floriated and fantastic character $\mathfrak{d}$, of two forms; the $s t$ in one piece-all these and more than these are to be found in one-quarter page, to which, moreover, the inserted quotations in Greek character of picturesque design add a further charm.
So much by way of episode. Good taste, or, at least, severe taste, would bid us go back to Italian models for all that is refined, and the act of opening the splendid volume of the Italian "Epistles of St. Jerome" (Ferrara, 1497) reminds the student that there is something else in the decoration of a page than merely beauty of typography and varieties of that beauty. The text is arranged in two columns to each page, with a broad, white band between, rivaling almost the width of the margin; and the column is broken continually by woodcuts as long from left to right as its own breadth. These woodcuts, concerning the authorship of which there has been some argument, are of beautiful design, in "outline," of course-that is to say, drawn in line and without more than indications of folds of drapery, subdivisions of flowing hair, or of beard, lines of rock and river, and the like-are yet in their small size and their simple composition of singular expressional and decorative value. Let it be admitted that such pictures as these were intended to be colored by hand ; it must also be admitted that they were intended to be lovely when not so colored, and it must always have been the fate of five copies to remain uncolored for one that received its full adornment. Some of these cuts are of special application as titles or tail pieces, as when a youth, or angel, is seen supporting a scutcheon-shaped tablet bearing a text to which St. Jerome points-" Diapsalma" or "Nisi Dominus edificaverit domum." Whether used as head and tail pieces or not, these cuts are put in where they are wanted, and without the slightest attempt at pretty spacings in the page. This, it would seem, is a good hint for modern bookmakers. Besides the cuts of significant subject there are really splendid capital letters, white on a black ground diversified with white bands and scrolls. The lettering itself is of singular grace and dignity. though without that great variety of form whirh has been alluded to above. The life of St. Jeron e, at the bt gi ming of the volume, has many more cuts in proportion than the Epistles themselves there are two pages framed with very splendid outline borders and two title pages of Gothic character, as if they had been designed a century before for a manuscript and were now copied in wood-engraving.

The well-known Italic letter seems to have been in vented as a perpetuation of manuscript, because it is more natural to the human hand to write in sloping than in strictly vertical strokes, and any engrosser will tell you that he can turn out Italic letters more readily than imitations of Roman characters. It is a curious question whether, if we were accustomed to it, we could read it with perfect ease. It lingered on in Italy for a long time. The "Velmatius," printed in Venice in 1533, finds its forms repeated, or nearly so, in the hundred stories of "Sansovino," printed in 1571 ; nor is this a late specimen of carefully made books printed throughout in that character. Till a much later date, and elsewhere than in Italy. the Italian type was used for prefaces and notes, as in the bouk of Cluvier cited above; but the Roman characte carried it over the Italian for the great body of a book even in Italy outside of Venice.
Of equal interest is the lingering desire to give something of the medieval picturesqueness to letters which are, on the whole, Roman in character. We find this more commonly outside of Italy than in the favored peninsula itself, and that is natural ; but it is curious to see it prevailing in Spain, and to note such a book as the "Letters of St. Jerome," in Spanish, printed at Seville in 1532, and to see how the workman has steered a middle course between the strong pull which he received from Italy and the generally overmaster ing influence of the Church.
It seems best to insist upon these simple elements of design because the modern printed book might easily be made beautiful in the ways indicated, while it can only at great cost be adorned with splendid borders, beautiful sub-text designs or variety of color. It is the fault which the critics find with Morris's attempts at specially made alphabets and fonts of type, that he should not have given more variety to his letters. Thus, in the alphabet used in "The Floure and the Leafe." edited by F. S. Ellis, one is at aloss to know why there were not three forms of the capital $T$ and six of the capital $W$, and as many of the lower case $f$ or $p$ or $y$ instead of the single form of each which one discovers in examining a page. The charm which would have been given by that single modification of the typography would have been unspeakable; and many a reader who would not have discovered the cause would still have found the page more lovely.Russell Sturgis in The Independent.

